

DIVISIONS AND THEIR DEPARTMENTS

Australian Centre for Educational Studies

The Australian Centre for Educational Studies (ACES) brings together Macquarie University's expertise in education across the lifespan – from early childhood to adulthood, and includes a focus on learners with special education needs. ACES is dedicated to the preparation of teachers and professionals who are well equipped to meet the needs of the rapidly changing contexts of contemporary teaching and learning, and who will become leaders in their fields as well as providing leadership within their communities. The Division comprises two Departments and one Centre:

Institute of Early Childhood, specialising in the preparation of teachers of children aged 0-8 years in long day care, pre-school and K-2 in primary school;

School of Education, specialising in the preparation of New South Wales primary and secondary school teachers; and

Macquarie University Special Education Centre, specialising in preparing students for the advanced professional duties of qualified special educators.

Areas of Study

The Division and its Departments offer programs in the following Areas of Study.

Area of Study	Award	Department
Early Childhood Studies	BA	IEC
Education	BA	School of Education
Teacher Education	BEd(ECE), BTeach (Early Childhood Services), BTeach(Birth to School Age), GradDip in Early Childhood	IEC
Teacher Education	BADipEd, BA-PsychDipEd, BBADipEd, BComDipEd, BEcDipEd, BScDipEd, BEd (Primary), BEd (Secondary)	School of Education

Degrees offered

Bachelor of Arts

Bachelor of Education (Early Childhood Education)

Bachelor of Teaching (Early Childhood Services)

Bachelor of Teaching (Birth to School Age)

Graduate Diploma in Early Childhood

Bachelor of Arts with Diploma of Education

Bachelor of Arts-Psychology with Diploma of Education

Bachelor of Business Administration with Diploma of Education

Bachelor of Commerce with Diploma of Education

Bachelor of Economics with Diploma of Education

Bachelor of Science with Diploma of Education

Bachelor of Education (Primary) for graduates

Bachelor of Education (Secondary) for graduates

Transfer between courses

Any student wishing to change his or her degree to another degree must meet the requirements set out in Part 1 of this Handbook, and a *Request to Transfer Degree Course* form must be completed.

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INSTITUTE OF EARLY CHILDHOOD

The Institute of Early Childhood is the major provider of early childhood teacher education in NSW, offering courses at undergraduate and postgraduate levels. Mia-Mia Child and Family Study Centre is an integral part of the Institute and provides unique opportunities for staff research and observational studies for units offered in child development, curriculum studies and early childhood education. The Early Childhood Arts Unit seeks to promote awareness of the importance of the arts in the development of young children. It offers seminars, forums, workshops, children's classes, exhibitions and performances with a particular focus on innovative programs and associated research projects.

School leavers and beginning students enrol in the Bachelor of Education (Early Childhood Education) program which prepares students to teach and work with children from birth to eight years. Students with previous qualifications may gain credit for previous studies towards an early childhood degree.

A graduate may find employment as an early childhood educator in primary schools, pre-school kindergartens or long day-care centres; or as a director/administrator of long day-care centre or kindergarten. She or he may be employed by a municipal council to coordinate a range of children's services in a local government area, or may become an early childhood adviser in a government department administering children's services. Such ser-

vices could include early intervention, family day-care, early childhood services for special needs children, before-and after-school care, emergency care, occasional care, toy libraries and mobile pre-school services.

Distance Education Program

The Institute is the leading Australian provider of specialised early childhood units by external study. Details are given in the Schedule of Undergraduate Units.

Bachelor of Education (Early Childhood Education)

This program involves four years' full-time study or equivalent part-time years. Graduates will be recognised as four-year-trained early childhood teachers by the Department of Education and Training and the Department of Community Services. This program is offered internally and by distance education, subject to availability of units and eligibility of students.

A full distance education program is also available for eligible students, that is, those with a previous teaching qualification or Associate Diploma/Diploma in Childcare/Community Services.

Majors and coherent studies

The following program satisfies the requirements for this degree and are currently offered by this Department:

Area of Study	Study Pattern	Code
Teacher Education	Early Childhood Teaching	TEDN02

Honours program

This program is available to students deemed eligible after completion of the first two years of the Bachelor of Education (Early Childhood Education) program. Honours candidates have the opportunity to pursue specialised research offerings.

Honours students are required to take:

Year 3

ECH315, ECH316, ECH319, ECH320, ECH326, ECHP323, ECHP324, ECHH300, ECHH301 (or equivalent)

Year 4

ECH425, ECHP422, ECHH401, ECHH440

Bachelor of Teaching (Early Childhood Services)

This program is offered to Aboriginal and Torres Strait Islander students. This degree qualifies graduates to work with children in services prior to school.

Majors and coherent studies

The following program satisfies the requirements for this degree and are currently offered by this Department:

Area of Study	Study Pattern	Code
Teacher Education	Early Childhood Services	TEDN01

All students are required to take the following, in the order indicated:

Year 1

ABEC120, ABFS110, ABFS120, ABSP100.

Year 2

ABEC110, ABEC121, ABEP130, ABMG140.

Year 3

ABEC150, ABEC211, ABFS210, ABSP200.

Year 4

ABEC220, ABEC311, ABEC350, ABEP230, ABEC241, ABSP300.

Year 5

ABEC210, ABEC212, ABEC222, ABEC320, ABEC340, ABEP330.

Bachelor of Teaching (Birth to School Age)

This program is offered over five semesters (two and a half years) to those students who already have the TAFE Diploma of Children's Services (Centre Based Care) or the Diploma of Community Services (Children's Services – Centre Based Care) or equivalent and who have at least one year's experience as a qualified worker in a centre-based setting. Applicants must also be currently employed in long day care, preschool, occasional care or an equivalent service. This program enables applicants to gain a teaching qualification in working with children from birth to school age. The program begins mid-year (second semester) and students enter the program with credit for previous study.

First semester of enrolment (second half year)
ECST100, ECST101.

Second semester of enrolment (first half year)
ECH315, ECHP323.

Third semester of enrolment (second half year)
ECH316, ECH326.

Fourth semester of enrolment (first half year)
ECH440 or any 4 credit point unit at 200 level or above, ECST200.

Fifth semester of enrolment (second half year)
ECHP444, ECH417.

Graduate Diploma in Early Childhood

This course is offered in three areas of specialisation:

Early Childhood Education in 0-5 settings

Students wishing to gain entry into this award should have a three or four year primary education teaching degree or diploma. The program is offered part-time over one and a half to two years, and is available in the internal or external study mode. Students are required to complete two practicum units as part of this program.

To qualify for the award, students must complete the following units: ECH113, ECH226, ECH229, ECH416, ECH425, ECHP324 and ECHP422.

Early Childhood Education and Intervention in 0-5 settings

Students wishing to gain entry into this award should have a three or four year Bachelor of Arts, Diploma of Education (Infants/Primary); Bachelor of Teaching (Early Childhood/Primary); Diploma of Teaching (Early Childhood/Primary) or Bachelor of Education (Early Childhood/Primary). For employment purposes, substantial experience as a teacher in settings for children from 0-5 years is highly recommended.

The program is offered part-time over two years or full-time over one year, and is available in the internal or external study mode. Students are required to complete a practicum unit as part of this program.

To qualify for the award, students must complete the following units: ECH320, ECH416, ECH440, ECH441, ECH445 and ECHP423.

Advanced Studies in Early Childhood

Students wishing to gain entry into this award should have a three or four year degree or diploma in early childhood teaching or a Bachelor of Arts with a coherent study/major in early childhood.

Please note: this degree does not provide a teaching qualification.

To qualify for the award, students must complete the following units: ECH416, ECH417, ECH425, ECH432, and two of ECH413, ECH426, ECH440, ECH441, ECHP423. ECHP423 is only available to those with an early childhood teaching qualification.

Bachelor of Arts

A coherent study in early childhood leading to a Bachelor of Arts degree, is offered.

Students enrolled in the outgoing Bachelor of Teaching (EC) and Bachelor of Education (EC) may, on application, complete a combination of ECE and ECH units as a coherent study for the Bachelor of Arts.

Please note this degree does not provide a teaching qualification.

Majors and coherent studies

The following program satisfies the requirements for this degree and is currently offered by this Department:

Area of Study	Coherent Study	Code
Early Childhood Studies	Early Childhood	ECH01

Unit Descriptions

Descriptions of units of undergraduate study in early childhood courses are given in Part Three of this Handbook.

Institute of Early Childhood enquiries

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SCHOOL OF EDUCATION

The community often thinks of education principally as what happens in schools, but a formal study of education takes a much broader perspective. Introductory units within the School of Education raise major issues confronting contemporary Australian education set against an international background. They also introduce students to the range of educational studies offered in subsequent units.

Macquarie University has made a major contribution to the education of primary and secondary school teachers and because it has developed both the range and the depth of its research and teaching activities, the School continues to play a very significant role in the education of teachers for the NSW education system.

Undergraduates wishing to teach follow the four-year full-time concurrent program (some of this may be on a part-time basis) leading to a BA DipEd, a BBA DipEd, a BSc DipEd, a BCom DipEd or a BEc DipEd. Graduates with a major in at least one teaching subject and who wish to teach follow the Graduate Diploma in Education or the BEd (Primary) or BEd (Secondary) programs. These students undertake programs of study which are part of the University's Teacher Education Program.

Many intending teachers undertake their major study outside the School of Education. Those planning to teach in secondary schools specialise in their teaching subjects. Those planning to teach in primary schools spread their major studies more widely, but should include a major study in education.

While most students undertaking units in education at Macquarie do plan to teach, a significant number undertake their major studies in education and enter such fields as curriculum development, educational planning, continuing education, education and training of adults and educational research. It is often necessary to have experience as a trained teacher in order to enter these fields

Distance Education Program

Many EDUC units are available by distance, with the usual format of taped or web-based lectures and some on campus attendance. It is possible to complete a coherent study in Education externally. In general TEP units are not available by distance offering.

Bachelor of Arts

The two 100-level education units are designed to provide an introduction to educational psychology and contextual studies in education. They can be completed in either order but both are needed to progress to 200-level. At 300-level units provide further studies in these core areas, background for intending teachers, and in areas of

particular educational relevance (eg Indigenous education, students with special needs).

Majors and coherent studies

The following program satisfies the requirements for this degree and is currently offered by this Department.

Area of Study	Coherent Study	Code
Education	Education	EDU01

Minimum course requirements are specified by the Bachelor Degree Rules that state, among other things, at least 18 credit points at 300 level or above.

Combined Bachelors Degrees and the Diploma in Education

The combined degrees of BA DipEd, BA-Psych DipEd, BBA DipEd, BCom DipEd, BEc DipEd and BSc DipEd provide a set of units for prospective primary and secondary teachers. The BA DipEd may be awarded with Honours.

Major and coherent studies

Area of Study	Coherent Study	Code
Teacher Education	Various	TED01

The minimum requirements include an aggregate of at least 92 credit points, including at least 68 credit points which satisfy the relevant degree of Bachelor; at least 12 credit points in TEP units; at least 12 credit points in EDUC units including EDUC262 or EDUC264, and such other units as have been prescribed by Academic Senate. Candidates must consult advisers within the Teacher Education Program, and ensure that they comply with requirements as specified in the TEP Student Guide.

Honours program

Candidates for admission to the Bachelor of Arts honours course in the School of Education will be expected normally to have obtained an average grade of not less than 3 in education units at 300 level; and to have obtained 18 credit points at 300 level, of which at least 12 should have been in education, excluding P-type units.

The program of study consists of a major area of study, for which each candidate will undertake a substantial investigation; a minor area of study, in a field distinct from that of the major area, associated with which each candidate will be required to present an essay; and coursework in educational issues.

It is strongly recommended that intending honours students should have completed undergraduate units which give them knowledge of a range of research methods appropriate to the study of education. Suitable learning experiences are provided by a number of units in the Schedule of Undergraduate Units in this and other Departments, including STAT 170 Introductory Statistics, EDUC406 The Educational Research Process.

Students who do not have such basic knowledge of appropriate research methods are advised to undertake individual study of methods relevant to education before commencing the honours year.

A candidate enrolled in the combined degree of BA DipEd may be awarded the degree of BA DipEd with Honours as specified in the Bachelor Degree Rules.

Bachelor of Education (Primary); Bachelor of Education (Secondary) for graduates

The School of Education offers graduate entry pre-service teacher education programs for both primary and secondary education. Applications are made directly to Macquarie University. Intending applicants are advised to obtain an assessment of their initial degree qualification for its suitability as a basis for teaching from the NSW Department of Education and Training before applying to Macquarie University.

Majors and coherent studies

Area of Study	Coherent Studies	Code
Teacher Education	Primary (for Graduates)	EDU02
	Secondary (for Graduates)	EDU03

Entry requirements

The Bachelor of Education (Primary) is open to graduates holding a recognised Bachelor degree, who have completed a one-semester unit in each of English, mathematics and a science discipline. Graduates without this background will be required to complete such units during the course of the program.

The Bachelor of Education (Secondary) is open to graduates holding a recognised Bachelor degree with a major in at least one teaching subject available in Macquarie's pre-service teacher education program.

Academic advice

Candidates must consult advisers with the Teacher Education Program and ensure that they comply with requirements as specified in the TEP Student Guide.

Graduate Diploma in Education

The Graduate Diploma in Education is open to graduates holding a recognised Bachelor degree with a major in at least one teaching subject available in Macquarie's pre-service teacher education program.

Academic advice

Candidates must consult advisers with the Teacher Education Program and ensure that they comply with requirements as specified in the TEP Student Guide.

Programs and Units

Approved programs of undergraduate study (majors and coherent studies) are listed in the section of this Handbook entitled "Schedule of Undergraduate Programs". The units of undergraduate study are listed in the "Schedule of Undergraduate Units", and brief descriptions are given in the section entitled "Descriptions of Undergraduate Units".

School of Education enquiries

Further information on units and courses may be obtained from Mr Grant Kleeman (100–300 levels) and

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Division of Economic and Financial Studies

The Division of Economic and Financial Studies provides a range of undergraduate units in economics, marketing, business administration, accounting, applied finance, theoretical and applied statistics, demography and actuarial studies.

While a major study in this Division may be combined with studies in the social sciences, law, languages and with the sciences, especially computing, it is possible for students intending to become specialist economists, accountants, actuaries, demographers or statisticians to undertake most of their work for the Bachelor degree in this Division. Such programs of study may be broadly similar to the pattern followed for the degree of Bachelor in other universities, but greater flexibility is possible within the Macquarie structure.

Although a first degree is essentially of an analytical and general education character, the successful completion of such a degree course provides a basic qualification for a variety of careers in the business, scientific and public service spheres and for teaching. It is also preparatory training for specialised and advanced study at graduate level.

Areas of Study

Programs in the following Areas of Study are offered by departments in this Division.

Area of Study	Award	Department
Accounting	BCom	Accounting and Finance
	BCom-Accg BCom-Accg LLB	
Actuarial Studies	BCom-ActStud	Actuarial Studies
	BCom-ActStud BEc	
	BCom-ActStud BSc	
	BCom-ActStud LLB	
	BEc	
Business	BA	Business
	BCom	
	BBA BIT	
	BBA BEc	
	BBA BA	
	BBA BA-Psych	
	BBA BSc	
	BBA BCom-Accg	
	BBA International	
	BBA	
BBA LLB		
Demography	BIntB	Business
	BCom	
	BSc	
	BSocSc	
	BA	
Economics	BEc	Economics
	BA	
	BCom	

	BEC	
	BCom LLB	
Finance	BAppFin	Accounting
	BAppFin BCom-ActStud	and Finance
	BAppFin BEC	
	BAppFin LLB	
	BAppFin BCom-Mktg	
	BAppFin BCom-Accg	
	BCom	
	BCom-Mktg LLB	
Human Resources	BHRM	Business
Marketing	BCom-Mktg	Business
	BCom	
	BCom-Mktg LLB	
	BEC	
Statistics	BCom	Statistics
	BSc	
	BA	
	BEC	

Degrees offered

All intending students must choose a program of study from the various Degree programs offered by the Division. The information given below should assist in this choice.

The specialist undergraduate degrees offered by the Division are the Bachelor of Applied Finance (BAppFin), Bachelor of Business Administration (BBA), Bachelor of Commerce (BCom) and Bachelor of Economics (BEC).

Students should note that there is a difference between specific named degrees BCom – Accounting and BCom – Marketing and a coherent study in those areas within the BCom, which would not be specified on the testamur.

All BEC and BCom programs are also valid BA programs, and therefore a candidate may choose to graduate with the BA. However there are also various possible programs which do not satisfy the BEC and BCom requirements, but which would still enable a BA to be obtained in the broad areas offered. This option may particularly interest students who wish to combine some economic and financial studies with studies in the behavioural sciences or history, especially if an interest in an interdisciplinary area such as economic history is held. In principle, combinations with any other areas of study may be chosen. Some programs (especially in Statistics) may also be constructed to satisfy the requirements of the Bachelor of Science (BSc). Any student aiming towards a BSc in an area of the Division should seek academic advice. The BA, BBA, BCom, BEC, BSc can be combined with a DipEd or LLB. The BAppFin can be combined with the LLB.

The following degrees are offered by this Division and its departments:

- Bachelor of Applied Finance
- Bachelor of Arts
- Bachelor of Business Administration
- Bachelor of Business Administration (International Studies)

- Bachelor of eBusiness
- Bachelor of International Business
- Bachelor of Commerce-Accounting
- Bachelor of Commerce-Actuarial Studies
- Bachelor of Commerce-Marketing
- Bachelor of Commerce/Bachelor of Economics
- Bachelor of Human Resource Management
- Bachelor of Science

Double Degrees

Accelerated double-degree programs can be completed in four years of full-time study.

- Bachelor of Applied Finance with Bachelor of Commerce – Accounting
- Bachelor of Applied Finance with Bachelor of Commerce – Actuarial Studies
- Bachelor of Applied Finance with Bachelor of Commerce – Marketing
- Bachelor of Applied Finance with Bachelor of Economics
- Bachelor of Business Administration with Bachelor of Arts in European Studies
- Bachelor of Business Administration with Bachelor of Arts in Japanese Studies
- Bachelor of Business Administration with Bachelor of Arts – Psychology
- Bachelor of Business Administration with Bachelor of Economics
- Bachelor of Business Administration with Bachelor of Commerce – Accounting
- Bachelor of Business Administration with Bachelor of Information Technology
- Bachelor of Commerce – Actuarial Studies with Bachelor of Economics
- Bachelor of Commerce – Actuarial Studies with Bachelor of Science

Entry requirements

Programs offered in accounting, applied finance, actuarial studies, business administration, economics, finance and marketing are subject to quota restrictions. Entry to these programs is guaranteed only to those admitted to the University under the respective BCom, BEC, BAppFin, BBA quotas. Programs leading to a major in statistics or demography are available to students registered for the BCom, BEC, BA, BSc, BSocSc or BMedSc degrees. Details of individual programs are given below.

Academic advice

Programs including ECON110 and ECON111 in the first year of study will almost invariably leave ample options available for later choice between the different degrees. However, students transferring into or out of the first year of the BBA may need to allow extra time for completion of their program of study. Academic advice will readily be available at subsequent stages for any students who seek to design programs towards a specific degree.

All BEC and BCom programs are also valid BA programs. Some programs may also be constructed to satis-

fy the requirements of the BSc. Any student aiming towards a BSc in the Division should be aware of the science requirements.

The emphasis in modern economic and business studies is increasingly quantitative, and many of the units offered reflect this emphasis. Accordingly many of the programs of study in the Division require a standard of mathematics equivalent to HSC Mathematics performance band 2 or extension 1 or extension 2. Students with less knowledge may have difficulty with key subjects. However, students with less than this level of mathematics may still undertake a program of study by following the procedures outlined below under the entry for the Department of Economics. For actuarial studies and applied finance a higher level of mathematics is required.

All areas of study require English language competency. Assistance is available for students with lower-level writing skills.

It is also important for graduates to have some knowledge of the use and potential of computers in areas of study within the division. All students majoring in the Division are strongly advised to include in their program COMP123 or COMP114 or COMP115 in addition to those units formally required as prerequisites.

The Division strongly encourages students to enhance their thinking and reasoning skills by completing the unit PHIL137, Critical Thinking.

Students who need to improve their English language skills are advised to enrol in EAP100 English for Academic Purposes I and EAP101 English for Academic Purposes II.

For further details about the availability of writing skills courses, remedial assistance for English, and introductory mathematics and computing courses, refer to Student Information.

The Bachelor Degree Rules the General Requirements for Bachelor Degree Awards and the *Schedule of Undergraduate Programs* provide full details of all requirements for the award of the Bachelor of Arts, Bachelor of Applied Finance, Bachelor of Commerce, Bachelor of Economics and Bachelor of Science. These degrees require 68 credit points, and 38 of these credit points must be at 200 level and above. In addition, 18 credit points must be completed at or above 300 level.

The essential difference between the Bachelor of Commerce and Bachelor of Economics degrees is that the Bachelor of Economics requires a minimum number of credit points in units with an ECON prefix at 200 level and above, including ECON232. Students may graduate with a Bachelor of Commerce even with a strong economics content. However, students in the disciplines of accounting, actuarial studies, demography and statistics are required to specifically plan in order to satisfy the BEc requirements.

Transfer between degrees

Any student wishing to change his or her degree to another degree must meet the requirements set out in Part 1 of

this Handbook, and a *Request to Transfer Degree Course* form must be completed.

Students enrolled for other Macquarie degrees who wish to transfer to the BCom – Accounting, BCom – Actuarial Studies, BCom – Marketing, BEc with a major study in Economics, BAppFin, BCom with a major study in Finance, BEc with a major study in Finance or BBA may apply for admission through the Universities Admissions Centre (UAC); or use an internal transfer mechanism. This requires specific academic performance as indicated by required grade point averages.

Students not enrolled for the Bachelor of Commerce or Bachelor of Economics, but who have satisfied the requirements of that degree, may choose to graduate as a Bachelor of Commerce or a Bachelor of Economics.

Division of Economic and Financial Studies enquiries

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DEPARTMENT OF ACCOUNTING AND FINANCE

The Department is divided into two main disciplines: accounting and finance. These disciplines are closely related but are discussed in separate sections below.

Accounting

Accounting is said to be ‘the language of business’ and understanding that language is a key component in career advancement. Accountants are employed in all areas of commerce, industry and government.

In these areas accountants undertake a range of activities such as participating with top management in setting future directions for an organisation, analysing potential growth opportunities for new products and markets, developing management information systems to facilitate decision-making and organisational control, as well as reporting regularly to management and other stakeholders on the performance of the organisation.

In public practice, accountants provide technical advice on current accounting, taxation and other legislative requirements, audit financial statements of corporations and government entities, and provide services through management consulting businesses in a range of areas including mergers and acquisitions, share issues, and planning and control systems design.

Several programs of study are offered that lead to a degree in accounting. Many of these programs include the units that satisfy the requirements of the professional accounting bodies (called the professional accounting sequence).

Bachelor of Commerce

Majors and coherent studies

The following programs satisfy the requirements for this degree and currently offered by this Department.

Area of Study	Coherent Study	Code
Accounting	Accounting	ACC01
Actuarial Studies	Risk and Insurance	ACT01
Finance	Finance	FNN06

Students who do not wish to obtain professional accounting qualifications but still want to complete an accounting degree, must include in their programs a common sequence of units leading to the coherent study ACC01.

Entry requirements

To undertake a degree in accounting, students must be eligible to enrol in the entry unit ACCG100 Accounting IA (or ACCG105 Introductory Financial Accounting).

Bachelor of Commerce – Accounting

The Bachelor of Commerce – Accounting is recognised as satisfying the tertiary educational requirements for entry into CPA Australia’s CPA program and the ICAA’s CA program.

Majors and coherent studies

The following programs satisfy the requirements for this degree and currently offered by this Department.

Area of Study	Study Patterns	Code
Accounting	Professional Accounting	ACCG03
Accounting Law	Professional Accounting & Law	ACCL01
Business Accounting	Business Accounting	BUS07
Applied Finance & Accounting	Applied Finance & Accounting	FNN01

Elective units can be chosen from but are not limited to those listed below:

100 level

MKTG101; ECON141; DEM127; PSY104; PSY105; PHIL137; PHIL134; GEOS111; GEOS114; HIST109; HIST112

200 level

PHIL263; MKTG202; MKTG203; DEM256; ECON200; ECON201

300 level

ACCG330; ACCG355; ACCG329; ACCG352; ACCG353; ACCG350; MKTG302; MKTG303; MKTG304; DEM355; DEM356; BUSL333; BUSL350; BUSL388; ECON303; ECON349; ECON350; ECON359; ECON360; ECON380

Status with Professional Bodies

There are a number of professional bodies that recognise Macquarie University’s accounting degree including CPA Australia, The Institute of Chartered Accountants in

Australia (ICAA), the Tax Agents Registration Board and the Australian Institute of Banking and Finance.

CPA Australia

Macquarie graduates who have completed the professional accounting sequence may be eligible for Associate (ASA) Membership with CPA Australia. Students are advised to contact CPA Australia concerning its policy in relation to conceded/terminal passes. In order to proceed to the status of Certified Practising Accountant (CPA), students must also complete at least three years of appropriate professional experience and CPA Australia’s CPA Program.

Institute of Chartered Accountants in Australia (ICAA)

Macquarie graduates who have completed the professional accounting sequence are eligible to enrol in the Institute’s professional program that leads to qualification as a chartered accountant. To undertake the Chartered Accountant (CA) program, candidates must be working for a firm of chartered accountants or an approved commercial/industrial firm.

[**Note:** Students transferring to Macquarie University who wish to have qualifications obtained at other tertiary institutions considered for accreditation by CPA Australia or ICAA are reminded that it is the student’s responsibility to ensure that these qualifications are acceptable to CPA Australia or ICAA.]

The Tax Agents Registration Board

Graduates wishing to become registered tax agents should contact The Tax Agents Registration Board for registration details.

The Australian Institute of Banking and Finance

A graduate who has completed a commercially relevant degree, which includes a marketing unit, a management unit, a basic business finance unit and three additional finance units, will satisfy the academic requirements for Associate and Senior Associate Membership of the Australian Institute of Banking and Finance. Suggested units for this purpose are MKTG101, BBA102, ACCG253, and any three 300-level units in the Finance coherent study listed above in the entry for the Division of Economic and Financial Studies.

Finance

The finance programs will appeal to those seeking careers in retail or commercial banking, corporate treasury, stockbroking and investment analysis or in the finance/treasury departments of the public sector. Finance studies at Macquarie are not located within a single discipline, but are taught cooperatively by several Departments. This structure recognises the interdisciplinary nature of finance, and allows students to combine studies in finance with complementary studies in economics, accounting and actuarial studies.

Bachelor of Commerce

Majors and coherent studies

The following program satisfies the requirements for this degree and is currently offered by this Department.

Area of Study	Coherent Study	Code
Finance	Finance	FNN06

Double Degrees

Students can enrol in three double degrees that include the accounting degree. These double degrees are:

Bachelor of Commerce – Accounting LLB;

Bachelor of Business Administration Bachelor of Commerce – Accounting; and

Bachelor of Applied Finance Bachelor of Commerce – Accounting.

These programs are more demanding because they take longer to complete but they provide the more capable student with a distinct advantage in terms of enhanced career opportunities.

The double degree BCom LLB takes five years of equivalent full-time study and students may achieve professional recognition in accounting by completing the professional accounting sequence (omitting units in Business Law but including LAW204 Contracts, LAW406 Business Organisations, and LAW503 Taxation). The Bachelor of Business Administration/Bachelor of Commerce – Accounting, and Bachelor of Applied Finance/Bachelor of Commerce – Accounting degrees can be completed in four years of equivalent full-time study.

Conversion Program for Non-Accounting Graduates

A conversion program is available for graduates in other disciplines who wish to meet the tertiary education requirements of the professional accounting bodies (CPA Australia and ICAA). Applicants are required to hold a degree from a recognised university in addition to having an adequate standard of academic English. Completion of the graduate conversion program normally qualifies graduates for the award of the Postgraduate Diploma in Accounting. (Details available from the Postgraduate Studies Section, ph: (02) 9850 7488.)

Honours Program

An honours program in accounting and finance is available to students with good academic records who wish to acquire research skills and to enhance their critical thinking and analytical and problem-solving skills in their chosen areas of study. An honours degree can enhance a student's employment and career advancement prospects and provide a student with greater career options including a possible career in universities, or in the research arms of professional accounting and financial institutions.

An honours program takes one year full-time. The program is individually tailored to suit each student's preferences and needs, and comprises coursework and a research project. All students in the program take a research methods unit in either accounting or finance. The number of students in the honours program is limited, and each student receives a high level of individual faculty member time and support. Each student is assigned a faculty member as mentor and supervisor to guide them in the development and conduct of the research project. A limited number of financial scholarships are available on a competitive basis and part-time tutoring is also available to provide further financial support for the honours year.

Students interested in learning more about the honours program in accounting and finance should contact the conveners of the program, Dr Ed Watts (edward.watts@mq.edu.au) or Gordon Boyce (gordon.boyce@mq.edu.au).

Department of Accounting and Finance enquiries

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APPLIED FINANCE

Bachelor of Applied Finance

The Bachelor of Applied Finance program is a specialist undergraduate finance program which provides a broad theoretical background in finance and specific technical skills that are required for many career opportunities in the finance industry. Units in the program develop theory and analytical techniques and apply them to real finance industry situations. The program is taught by highly qualified and experienced staff who have a thorough understanding of finance industry practices.

Applied Finance graduates are well qualified for employment in finance and banking, both in Australia and internationally, and have excellent career opportunities in specialist financial institutions, treasury and finance departments of large private companies, security and currency trading, portfolio management, and general financial and investment advising.

Majors and coherent studies

The following program satisfies the requirements for this degree:

Area of Study	Study Pattern	Code
Finance	Applied Finance	APFN03

Double Degrees

Students can enrol in five double degrees involving applied finance:

Bachelor of Applied Finance/Bachelor of Commerce – Accounting (FNN01)

Bachelor of Applied Finance/Bachelor of Commerce – Actuarial Studies (FNN02)

Bachelor of Applied Finance/Bachelor of Economics (FNN05)

Bachelor of Applied Finance/Bachelor of Laws (FNCL02).

Entry requirements

Entry to the applied finance program is available to those who meet the UAC admission requirements for the Bachelor of Applied Finance (or a double degree involving Applied Finance), provided that they have taken less than 12 credit points (one semester of full time study) at Macquarie. Students enrolled in any other program at Macquarie may transfer to the BAppFin when they have completed 12 credit points or more with an overall grade point average of 2.25 or above. Separate entry requirements exist for mature-age students (over 20 years of age).

Professional recognition

As a commercially-relevant degree, the Macquarie Bachelor of Applied Finance satisfies the academic requirements for Associate and Senior Associate Membership of the Australian Institute of Banking and Finance, provided graduates include in their degree program a marketing unit and a management unit. Suggested units for this purpose are MKTG101 and BBA102.

Honours program

Students with good academic records are encouraged to enrol for an honours year. Honours programs in Applied Finance are offered in the Department of Economics and in the Department of Accounting and Finance. As Honours graduates it is expected that they will be able to solve a wide range of theoretical and practical problems in their work or academic environment.

As one of the primary purposes of the Honours program is the provision of research training, candidates for the Honours degree will have the opportunity to pursue, in depth, the investigation of a topic of interest to them, and to present the results of their research in the form of a dissertation. Staff will work closely with candidates at the beginning of their candidature in order to devise an interesting and accessible dissertation topic. For further details contact the program coordinator, Chris Heaton (chris.heaton@mq.edu.au).

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DEPARTMENT OF ACTUARIAL STUDIES

Actuaries analyse and manage the risks of financial contracts. The actuary's work is based on the application of mathematical, statistical, economic and financial analysis

to a wide range of practical problems in long-term financial planning and management. Actuaries act as financial advisers to a wide range of commercial organisations such as life, general (non-life) and health insurance companies, superannuation funds, banks and stockbrokers as well as governments. In recent years a growing number of actuarial graduates have been employed by banks, merchant banks, funds management companies and software development companies.

Actuaries require a sound theoretical training, but of more importance is the ability to exercise proper professional judgment in dealing with the many practical problems encountered. The ability to express conclusions in clear and concise language is essential.

Bachelor of Commerce – Actuarial Studies

The BCom – Actuarial Studies degree may be completed in three years of full-time study giving students the possibility of exemption from Part I of the Institute of Actuaries Australia (IAAust) examinations.

Majors and coherent studies

The following program satisfies the requirements for this degree and currently offered by this Department.

Area of Study	Study Pattern	Code
Actuarial Studies	Actuarial Studies	ACT10

Double Degrees

Double degree programs allow students to gain exemption from both Part I and Part II of the IAAust examinations and to complete a second major. They are four-year programs except for the double degree with law. The following are offered:

Bachelor of Applied Finance/Bachelor of Commerce – Actuarial Studies (FNN02)

Bachelor of Commerce – Actuarial Studies/Bachelor of Economics (ACT03, ACT04);

Bachelor of Commerce – Actuarial Studies/Bachelor of Science (ACT05, ACT11, ACT12);

Bachelor of Commerce – Actuarial Studies/Bachelor of Laws (LAW15).

The BCom – Actuarial Studies LLB (LAW15) requires six years of full-time study if all the actuarial exemptions are to be obtained. The recommended actuarial studies program is completed in Years 1 to 4 together with the 100-, 200- and 300-level LAW units. The LLB is completed in Years 5 and 6.

For details of the LLB program, see the entry for the Division of Law in this Part of the Handbook and the entry for coherent study, LAW15 in the Schedule of Undergraduate Programs.

Entry requirements

Entry into the actuarial program is restricted by quota. Students are guaranteed a place in ACST151, Introduction to Actuarial Studies, only if admitted to the

BCom – Actuarial Studies program or the associated double degrees. A UAI above 97.5 is recommended. The program is advised only for students who have completed NSW HSC Mathematics Extension 2 or NSW HSC Mathematics Extension 1 with a very high mark or an equivalent mathematics subject. Although there is no formal requirement for a minimum result in English, students are reminded that actuaries need excellent skills in written communications.

Applicants transferring from a tertiary institution will have their whole academic record taken into account. Graduates may be able to complete a degree in less than three years.

Continuing students may transfer to the BCom – Actuarial Studies if they meet the requirements set out in Part 1 of this Handbook.

Professional accreditation

Units offered in actuarial studies are designed to provide the necessary theoretical training in such topics as mathematics of finance, actuarial techniques in life insurance, non-life insurance and mortality studies, and the professional considerations involved in actuarial management.

In general only Fellows of the Institute of Actuaries of Australia, the Institute of Actuaries (London), the Faculty of Actuaries (Edinburgh) or the Society of Actuaries (USA and Canada) are permitted to practise as actuaries in Australia. The examinations of the Institute of Actuaries of Australia (IAAust) comprise three Parts. A BCom - Actuarial Studies graduate who has obtained sufficiently high grades in the relevant Macquarie units may be granted exemption from the Part I and Part II subjects of the IAAust. Overseas students may be granted exemption from Subjects 101 to 109 of the London Institute or Faculty examinations, which are equivalent to Part I of the IAAust examinations.

The professional qualification, Fellow of the Institute of Actuaries of Australia (FIAA), requires completion of two Part III subjects from the five offered by distance education by the IAAust. Part III subjects are usually studied part-time after completion of the Macquarie program and no exemptions are available from them. The Part III subject areas are Investment Management, Finance, Life Insurance, General Insurance and Superannuation and Planned Savings.

The FIAA is widely recognised in countries that do not have their own local system of actuarial qualification, including New Zealand and many parts of Asia. Mutual recognition agreements also exist with the professional bodies in Britain and North America, so that FIAAs are fully qualified as actuaries in those regions after a short period of work experience.

Academic advice

A program designed to secure the maximum exemptions from the examinations of the Institute of Actuaries of Australia, the Institute of Actuaries (London) or the Faculty of Actuaries (Edinburgh) should include the following units:

Year 1

ACST101; ACST151; ACST211; ACCG105; ECON110; ECON111; MATH133; STAT171; COMP115 or COMP125

Year 2

ACST200; ACST255; ACCG253; ECON201; STAT271; STAT272

Year 3

ACST300; ACST305; ACST354; ACST355; ACST356; ACST357

Year 4

ACST400; ACST401

This program should lead to one of the coherent studies listed in the Schedule of Undergraduate Programs: either ACT10 for the BCom-Actuarial Studies, or ACT03, ACT04, ACT05, ACT11, ACT12, FNN02, LAW15 for double degrees. Recommended double degree programs are available from the Actuarial Studies Department website.

Please note: ACST354, ACST355, ACST356 and ACST357 will replace ACST344, ACST345 and ACST399 in 2006.

Honours program

Students contemplating an honours year should discuss their program with the coordinator of the honours program, preferably by the end of their second year. A suitable program of coursework, reading and research work will be devised for each student and will normally consist of the units ACST400 and ACST401 Actuarial Control Cycle 1 and 2, some further coursework and a thesis.

Note that the honours program can only be commenced in Semester 1 at the beginning of the academic year and requires one year of full-time study or, in special circumstances, two years of part-time study.

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DEPARTMENT OF BUSINESS

There is increasing demand in both private and public sectors for employees with comprehensive business training. The pressures upon business for increasing internationalisation and competitiveness mean that more and more emphasis is being placed on modern management skills.

The Department of Business offers courses in business administration, demography, human resource management, international business and marketing and related disciplines that equip students with the skills needed in a modern business environment.

Bachelor of Business Administration

The Bachelor of Business Administration is an interdisciplinary course. The BBA provides a broad and comprehensive preparation for students wishing to pursue a career in business management without undertaking a full specialisation in such subject areas as accounting or economics. The Bachelor of Business Administration (International Studies) has a similar program of study to the BBA but provides an opportunity for a semester's overseas study as a component of the degree program.

With the range of elective subjects available, the degree provides diverse career opportunities in the private and public sectors – for example, in accounting, banking, business management, consulting, computing, financial management, human resource management, international business, marketing, recruitment and staff development.

Travel Scholarships

Each year, Macquarie University will offer 10 BBA (International Studies) travel scholarships of up to \$A3500 each to cover fares of final-year students to approved overseas institutions. These competitive scholarships will be awarded on the basis of academic performance in the BBA (International Studies) and the student's proposed travel program.

Majors and coherent studies

The following programs satisfy the requirements for this degree and currently offered by this Division.

Area of Study	Study Pattern	Code
Business	BBA	BUSN001

Bachelor of Business Administration Bachelor of Laws

The BBA LLB double-degree program provides a powerful joint qualification in business and law. It entails the full LLB sequence (with some change in the order in which units are undertaken), together with the full core component of the BBA. See coherent study LAW05 in the Schedule of Undergraduate Programs.

Majors and coherent studies

The following programs satisfy the requirements for this degree and currently offered by this Department.

Area of Study	Coherent Study	Code
Business	Business Administration + Law	BUSN15

Bachelor of Business Administration/ Bachelor of Commerce – Accounting

This accelerated double-degree program permits students to complete the full BBA program together with a coherent study in accounting. It meets the tertiary education requirements of both CPA Australia and the Institute of Chartered Accountants in Australia.

Majors and coherent studies

The following programs satisfy the requirements for this degree and are currently offered by this Department.

Area of Study	Coherent Study	Code
Business	Business Accounting	BUSN007

Bachelor of Business Administration/ Bachelor of Economics in Economics or Econometrics

Students undertaking this accelerated double-degree combination complete both the full BBA program and a coherent study in economics or econometrics. The latter qualifies them for employment as professional economists.

Majors and coherent studies

The following programs satisfy the requirements for this degree and are currently offered by this Department.

Area of Study	Coherent Studies	Code
Business	Business + Economics	BUSN08
	Business + Applied Econometrics	BUSN09

Bachelor of Business Administration/ Bachelor of Information Technology

This double degree program, by combining technology with commerce, prepares students for a career in information technology and business. There is high demand for people with both qualifications. Career choice includes business analysis, systems analysis, systems development and many other areas where technology and business understanding are fundamental to creating wealth and opportunity.

Majors and coherent studies

The following programs satisfy the requirements for this degree and are currently offered by this Department.

Area of Study	Study Pattern	Code
Business	Information Technology	BUSN016

Bachelor of Business Administration/ Bachelor of Arts in European Studies

This double degree aims to develop a broad based understanding of business, coupled with comprehensive study of a European language. Units will be offered in European business, history and culture. The University will offer the opportunity for a semester's study abroad with travelling scholarships available to the top students. This degree is able to accommodate students with no prior knowledge of a foreign language as well as those with previous experience.

Area of Study	Study Pattern	Code
Business	European Business and Language Studies A	BUSN011
	European Business and Language Studies B	BUSN012

Bachelor of Business Administration/ Bachelor of Arts in Japanese Studies

This accelerated double-degree program provides students with a thorough understanding of Japanese business, economics and institutions. Graduates from this program will be highly knowledgeable about Japan and the Japanese people, rather than being simply business students with a smattering of Japanese. Not only does this make sense from an academic point of view, it also greatly increases the student's opportunities for gaining employment upon graduation. Students are provided with a comprehensive grounding in the Japanese language, and have an option for the last half-year to be spent taking units at a Japanese university. As part of this four-year program, students are required to choose both elective modules in Japanese business.

There are possibilities for internships over the summer breaks.

Majors and coherent studies

The following programs satisfy the requirements for this degree and are currently offered by this Department.

Area of Study	Coherent Study	Code
Business	Business & Japanese A	BUSN03
	Business & Japanese B	BUSN04
	Business & Japanese C	BUSN05

Bachelor of Business Administration/ Bachelor of Arts – Psychology

This four year program provides a joint qualification in business and psychology, with the possibility of proceeding to the Honours program in either business or psychology. The program is the same as that leading to the straight BBA, except that students must take the elective in Organisational Psychology. The Psychology component of the double degree is equivalent to the BA – Psychology.

Majors and coherent studies

The following programs satisfy the requirements for this degree and are currently offered by this Department.

Area of Study	Coherent Study	Code
Business	Business & Psychology	BUSN06

Bachelor of International Business

This degree will give the students an academic background in topics that underpin international business decisions and give them a thorough understanding of why international business is different and how opportunities for international business occur. Students will get an opportunity to consider the underlying socio-cultural factors and differences in the international business environment, to explore these factors and differences and to consider their implications for business decisions in both an international and Australian context.

Majors and coherent studies

The following programs satisfy the requirements for this degree and currently offered by this Department.

Area of Study	Coherent study	Code
Business	International Business	BNT01

Demography

Demography studies the changing size and composition of human populations, their causes and consequences. Aspects of the composition of population of interest to demographers include sex ratios, age structure, ethnic structure and family structure. The causes of population change include fertility, mortality, migration, age change, marriage and social mobility and the consequences of such changes are wide-ranging.

In Australia, demographers are employed in planning departments, public service departments such as the Australian Bureau of Statistics and the Department of Immigration and Ethnic Affairs, or are working in academic or other research institutions. There is also an increasing demand for trained demographers in the market research and development and planning sections of business enterprises.

The core program in demography consists of the following units:

100 level

DEM127

200 level

DEM255; DEM256

300 level

DEM355; DEM356

Students with a substantial interest in the study of human population problems and issues are advised to also take population-oriented units offered in complementary subjects such as anthropology, economics, human geography, marketing, sociology or statistics or other units in the Population Studies programs. Programs leading to a coherent study in Population Studies are coded PPL01 to 07.

Bachelor of Human Resource Management

This degree explores the management of people and change in contemporary workplaces. A strong emphasis is placed on the psychology of learning and the processes and techniques of developing a learning organisation. Students will also gain a strong understanding of the sociology of work and organisational behaviour in the workplace. Contemporary managers need to analyse global work structures and how individual and organisation needs are managed across global boundaries and global cultures.

The degree is also designed to develop change agent skills. The capacity to analyse and interpret different change environments is fundamental to success in this area. Modern human resource managers require coaching and consulting skills as the traditional human resource management function has shifted in recent years. The program of study has a final work experience unit where students spend time in an organisation, practising and

working on a human resource management project and refining their skills and competencies. The practical component thus provides students with working experience in human resources before completing their degree and is an additional bonus of the new structure. The first year of the program is a fixed course of study covering fundamental human resource issues coupled with introductory psychology units. Students, however, can study four units of electives equal to 12 credit points over the full program.

Macquarie University already has access to many large companies that are actively involved with university programs. Some of these will be participants in the work-study program in the final year. Opportunities may be available as a result of these placements although in every case, graduates will be responsible for promoting their own careers. Many large organisations also have graduate programs in human resource management and it is envisaged that graduates will be well positioned to take advantage of such opportunities.

Majors and coherent studies

The following programs satisfy the requirements for this degree and are currently offered by this Department.

Area of Study	Study Pattern	Code
Human Resource Management	Human Resource Management	HRMT01

Professional Accreditation

The Bachelor of Human Resource Management is fully accredited with the Australian Human Resource Institute (AHRI). Students will qualify for provisional membership when commencing the degree and will advance to full membership when the degree is completed.

Marketing

Marketing involves understanding and anticipating customer needs and wants, then satisfying those needs in a way that generates a long-term flow of profit for the marketing organisation. The balance of the benefits a customer receives from a product or service minus the full cost of acquiring and utilising it, is termed customer value or satisfaction. The marketer generates the best flow of profit by offering the greatest long-term value to the customers.

Demand for marketing skills flows across all sectors of the economy, from the traditional marketers of consumer goods, to the rapidly growing services sector, to government and the not-for-profit sector. Organisations are recognising the need for marketing expertise, the ability to accurately identify customers and their needs, and to turn target groups into long-term loyal customers or supporters.

Marketing studies at Macquarie provide a strong grounding in marketing theory, reinforced by analysis of the best current marketing practice both in Australia and internationally.

Bachelor of Commerce – Marketing

The Bachelor of Commerce – Marketing is a specialist degree which explores marketing principles and current issues in the greatest depth.

Majors and coherent studies

The following programs satisfy the requirements for this degree and are currently offered by this Department.

Area of Study	Study Pattern	Code
Marketing	Marketing	MKTG01

Professional Accreditation

As a commercially relevant degree, the Macquarie Bachelor of Commerce – Marketing satisfies the academic requirements for associate membership of the Australian Marketing Institute.

Honours program

The Business Department offers honours programs in business administration, international business, demography and marketing. Entry to the program is selective, with students who have completed a Bachelors degree in Business normally accepted into the program only if their GPA is at least 2.5 overall and at least 3.0 at 300-level. The program comprises coursework and a major research project. The particular program of each student is tailored to suit specific preferences and needs. There are six units in the Honours Program, comprised of one compulsory unit (BBA401 Research Project), two elective units from BUS 800-BUS 849, MKTG 800-level and/or DEM 800-level offerings, and an original piece of research (thesis) of approximately 15,000 words. The program requires full-time enrolment and accepts students only in Semester 1 of the academic year.

Semester 1

BBA401

Two approved elective units

Semester 2

Thesis equivalent to three units

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DEPARTMENT OF ECONOMICS

Economics studies how societies deal with problems resulting from relative scarcity, ie problems of allocation, distribution, stability and growth. It involves the analysis of production, distribution and use of goods and services in all types of societies. It is concerned with how economic systems are organised and with how decisions are made by individuals, business firms and governments. Studies in economics may lead to a variety of careers in

industry, commerce, banking, education and government service.

A student who completes a substantial and coherent study in economics chooses from a wide variety of programs within the discipline, the choice depending to a large extent on the student's interests and goals. Some students may choose to follow a highly specialised program concentrating on a particular area, such as econometrics, whereas others may prefer to acquire a broadly based general economics training. In some cases students may wish to combine a major in economics with specialised study in another field within the Division, such as accounting, finance, marketing or statistics, or in some other area such as politics, history, geography, law or sociology.

The following programs in economics are offered by the Department:

Economics BA	ECN01, ECN05, ECN06, ECN07
BCom	ECN03, ECN08, ECN09, ECN10
BEc	ECOS02, ECMT03, ECOS04, ECN11, ECN12, ECN13
BCom LLB	ECOL02

The following double-degree programs can be completed in four years of equivalent full-time study:

Bachelor of Business Administration/Bachelor of Economics (BUS07, BUS08)

Bachelor of Applied Finance/Bachelor of Economics (FNN05)

Bachelor of Commerce – Actuarial Studies/Bachelor of Economics (ACT03, ACT04).

Academic advice

All students majoring in economics must include in their programs a common sequence of units leading to the required coherent study above 200 level.

100 level

ECON110; ECON111; STAT170 or STAT171 ; ECON141

Students who lack the mathematics background of HSC Mathematics performance band 2 or extension 1 or extension 2 will be required to take as a corequisite MATH123 Mathematics 123.

200 level

ECON200; ECON201; ECON210

300 level

ECON309; ECON311

and at least 6 credit points from other 300-level ECON units.

Students intending to graduate with the BCom or BEc degree must also ensure that they have at least 18 credit points in units above 200 level that are approved for the BCom or BEc Rules.

In addition there are several further units which, though not essential in the sense of being required to achieve a

coherent study, are nevertheless highly desirable for inclusion in any economics program. These are:

100 level

ACCG100; ACCG101; ISYS123 or ISYS114 or COMP115

Students are free to choose units to complete their programs in any way that suits their particular requirements and interests (subject to the Bachelor Degree Rules). Most students majoring in economics take at least some further units in the economics subject area, and most also choose supplementary units from other fields. Some alternatives are suggested below:

General Economics

A broadly-based program will probably include, in addition to the common sequence, a number of units taken in other fields. Units that might be considered as contributing to a general economics education include:

ECON211; ECON235; ECON240; ECON303; ECON350; ECON356; ECON359; ECON360; ECON380; ECON396

together with units from other Departments, especially anthropology, history, philosophy, politics, psychology and sociology.

Professional Economics

Students contemplating careers as economists in government, business, banking or academia could include at least some of the following in addition to the economics common sequence:

ACST101; ACCG253; STAT279

and one or more 100-level units in mathematics, together with more than the minimum 12 credit points above 200 level in economics units. In particular, students may wish to develop a specialisation in areas of economics such as monetary economics, labour economics, economic development, econometrics, economic history, urban and environmental economics, industry economics, or Asian economic studies.

Econometrics

There is a growing need for economics graduates to possess skills in the techniques of empirical analysis which is increasingly reflected in the qualifications desired for positions in such employing organisations as the Bureau of Statistics, Treasury, Reserve Bank, commercial and merchant banks and consulting companies. The econometrics sequence of study, therefore, serves to provide the student with such quantitative tools as are needed for the conduct of empirical economic analysis.

STAT170 or STAT171; ECON141; ECON232; ECON332; ECON233; ECON333

Economics and Commerce Teaching

Students who are taking the combined BCom/BEc/BA DipEd courses and wish to satisfy the NSW Department

of Education requirements for promotion should carefully consult the Teacher Education Program Student Guide with reference to units to be taken in social sciences other than economics. Such students should combine the economics core sequence with ACST101 Techniques and Elements of Finance (3), EDUC105 Educational Studies I (3), and EDUC106 Educational Studies II (3); additional units at 100 level in other social sciences; BUSL250 Business Law; required units in education and other social sciences at 200 and 300 level.

Students undertaking this program should note that additional studies in mathematics are also desirable.

Social Implications of Economics

Programs with emphasis on the social implications of economics (economic development, economic and social welfare, the interface between economics and politics, etc) might include, in addition to the economics common sequence, the following units:

DEM127; DEM255; DEM355; ECON211; ECON235; ECON240; ECON349; ECON359; ECON380; ECON396

Labour Studies

Students whose primary interest lies in economics but who have a special interest in the field of labour studies would be advised to include the following units in their program:

ECON240; BUSL250; BUSL333

Japanese Economic Studies

A coherent study leading to a BCom or BEc, is offered in Japanese Economy and Language for students specialising in both economics and Japanese. To pursue recommended programs for coherent studies ECN06, ECN09 or ECN12 a student should complete the following units:

Japanese Economy and Language

100 level

JPN110; JPN111

200 level

ECON235; JPN221; JPN222

300 level

ECON349; ECON394; JPN350

Japanese Economic Studies

200 level

ECON235

300 level

BBA320; ECON394

and 3 credit points chosen from:

ECON303; ECON332; ECON333; ECON335; ECON350; ECON360

For details of other programs of study in Asian Studies, see the entry for Asian Studies in the Interdisciplinary Studies section in this Part of the Handbook.

Finance/International Finance

The huge domestic and global finance sectors offer attractive employment opportunities for economics graduates specialising in finance/international finance. As our finance program spans several departments, students are advised to check the various study requirements so that they are allowed to enrol in the following third-year finance units:

ECON335; ECON350; ECON360; ACCG329; ACCG352

Rotation of Unit Offerings in Economics

To assist in forward planning, the following table shows the intended day and evening offerings of all non-core units in economics for this year and next year. Note that the information contained in this table may be amended as circumstances change.

	2004	2005
ECON211	D2	D2
ECON232	DE1	DE1
ECON233	E2	D2
ECON235	D1	DE1
ECON240	D2	D2
ECON303	DE	D2
ECON332	E1	E1
ECON333	E2	D2
ECON335	D2	E2
ECON349	E1	D1
ECON350	DE1	DE1
ECON356	DE	D1
ECON359	D2	D2
ECON360	DE2	DE2
ECON361	D2	D2
ECON380	D1	D1
ECON394	D1	D1
ECON396	D1	D1

Honours program

Students with excellent academic records are encouraged to enrol for an honours year. Honours graduates are expected to be able to solve a wide range of theoretical and practical problems in their work environments.

A suitable program of coursework and research work is devised for each candidate. The coursework part of the program consists of five units of study including Advanced Macroeconomics, Advanced Microeconomics and ECON356 History of Economic Thought (if that unit has not already been taken as part of the undergraduate program). The remaining electives (two or three) will be chosen from a list of honours options made available at the beginning of the honours year.

Candidates for the honours degree will have the opportunity to pursue, at depth, the investigation of a topic of interest to them, and to present the results of their research in the form of a dissertation. The Economics Honours Coordinator, in conjunction with other members of staff, will work closely with candidates at the beginning of their candidature in order to devise an interesting and accessible dissertation topic.

Candidature is available on a full-time or part-time basis and cadetships to support honours study are sometimes made available by organisations such as the Reserve Bank of Australia, the Commonwealth Department of Finance and APRA. The Department of Economics also offers honours year scholarships for suitably qualified students. For further information contact the Economics Honours Coordinators, the Head of Department, Mr Tony Bryant, (02) 9850 8465 and Professor Rod O'Donnell, (02) 9850 8480.

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DEPARTMENT OF STATISTICS

Statistics, in its broadest sense, is the art of summarising and extracting information from data, building models to simulate reality, and making decisions on the basis of these models. It is the discipline which formalises scientific method, and it embraces much of what is now known as information science. Statistical methods are essential to any quantitative field, and are used extensively in such diverse areas as medicine, management, investment planning, opinion research, political science, public policy, environmental studies, economic forecasting, transportation, telecommunications, linguistics and law.

In Australia, professional statisticians are employed in the various Federal and State government departments, in the Australian Bureau of Statistics, in the CSIRO, in hospitals, and in industry, particularly with pharmaceutical, insurance, chemical, mining, market research and computer software companies. With the rapid and continuing development of computer technology, and the associated information explosion, there is a sizeable and growing demand for graduates trained in statistics and computing.

The course of studies in statistics at Macquarie is aimed at training professional statisticians who are equipped to meet the challenges provided by an increasingly information-oriented society. The basic program involves units in probability, statistical methods, computing, operations research and research design. This program is flexible and may be tailored to meet the needs of individual students. For example, there are several programs permitting inclusion of units in computer hardware and information systems. Alternatively, the statistics program may be combined with the study of a substantive discipline

such as geography, linguistics or psychology; there is a strong demand for graduates with such dual qualifications.

Academic advice

For statistics programs in Bachelor of Arts, Bachelor of Science, Bachelor of Commerce and Bachelor of Economics students should include the following units:

100 level

STAT170 or STAT171; STAT175; and COMP or ISYS unit

200 Level

STAT270 or STAT271; STAT273 or STAT272; STAT278 and/or STAT279

The prerequisite structure of units of study in statistics means that students can take some 300-level units in their second year. In general, this is to be avoided. Instead, students are strongly advised to complete 200-level study in statistics and another subject area before proceeding to 300-level study in statistics.

Programs leading to a major in statistics are also available to students registered for the BMedSc degree.

Honours program

An honours program of study in statistics normally includes units in advanced probability, statistical theory and statistical computing, and advanced units from statistics or related areas such as mathematics, demography, econometrics and computing science; together with a report of an investigative nature (contributing at most 30% of the overall assessment).

Students entering the honours course will normally be expected to have completed the units MATH236, STAT371 and STAT378. It should be noted that an overall grade point average of at least 2.5 is normally required in addition to the 300-level grade point average requirement of not less than 3.0 in statistics.

Students contemplating an honours year in statistics should discuss their program with the Director of the honours program as early as possible.

Department of Statistics enquiries

Room: C5C 475
 Phone: +61 2 9850 8555
 Fax: +61 2 9850 7669
 Email: statistics@efs.mq.edu.au
 Website: www.mq.edu.au/statistics

Division of Environmental and Life Sciences

The Division of Environmental and Life Sciences (ELS) brings together the departments of Biological Sciences, Chemistry, Health and Chiropractic, Earth and Planetary Sciences, Human Geography, Physical Geography and the Graduate School of the Environment. We teach, research and consult across the broad area of environmental and life sciences as well as within the specific disciplines related to our distinctive departments. Our work is underpinned by partnerships with industry and a commitment to developing an understanding of the importance of science and technology in society.

ELS is one of the leading research bodies within Macquarie University. We are highly regarded for our research achievements and we seek to maintain national and international leadership in specific research areas as well as become involved in creative and innovative research collaborations in new areas. The Division is home to a number of research centres including the National Key Centre for Geochemical Evolution and Metallurgy of Continents, the Australian Centre for Astrobiology, the Centre for Biodiversity and Bioresources, Macquarie University Centre for Analytical Biotechnology and the industry funded Natural Hazards Research Centre - Risk Frontiers.

The Division has a strong commitment to developing the synergy between active teaching and engagement in research and this is reflected in a number of its programs including those in medical science, biotechnology, chiropractic science, environmental science, environmental management, health, marine science, museum studies and science education. We aim to present our students with opportunities to experience the practical application of their chosen area of study through field study and work placements. We also aim to provide our graduates with generic skills that are applicable not only to their future careers but also to every day life.

Areas of Study

The Division and its departments offer programs in the following Areas of Study.

Area of Study	Award	Department
Atmospheric Science	BA, BSc	Physical Geography
Biodiversity & Conservation	BSc	Biological Sciences
Bioinformatics	BSc	Biological Sciences
Biology	BA, BSc	Biological Sciences
Biotechnology	BSc	Chemistry
Business Administration	BBA BSc	EFS and ELS
Chemistry	BA, BSc	Chemistry
Chiropractic	BChiroSc	Health and Chiropractic

Environmental Sciences Geocology	BEnvSc, BEnvMgmt/LLB BA, BSc	ELS Law Physical Geography
Geographic Information Science	BA, BSc	Human Geography, Physical Geography
Geology, Geophysics & Exploration Geoscience Health	BA, BSc, BTech(Exploration Geoscience) BHlth	Earth and Planetary Sciences Health and Chiropractic
Human Geography	BA, BSc, BSocSc	Human Geography
Law	BSc LLB	Law
Marine Science	BMarSc	ELS
Medical Sciences	BMedSc	Biological Sciences, Chemistry
Museum Studies	BSc BA	Earth and Planetary Sciences
Physical Geography	BA, BSc	Physical Geography
Population Studies	BA, BSocSc	Human Geography
Resource & Environmental Management	BA, BSc	Human Geography, Physical Geography
Social Science Geography Science	BA, BSocSc BSc	Human Biological Sciences, Chemistry, Earth & Planetary Sciences, Human Geography, Physical Geography

Degrees Offered

- Bachelor of Science
- Bachelor of Science with Bachelor of Laws
- Bachelor of Science with Diploma of Education
- Bachelor of Arts
- Bachelor of Social Science
- Bachelor of Chiropractic Science
- Bachelor of Environmental Management
- Bachelor of Environmental Management with Bachelor of Laws
- Bachelor of Environmental Science
- Bachelor of Environmental Science with Bachelor of Laws
- Bachelor of Health
- Bachelor of Marine Science
- Bachelor of Medical Sciences
- Bachelor of Science with Bachelor of Arts
- Bachelor of Technology (Exploration Geoscience)

Coherent Studies within the Bachelor of Science and Bachelor of Arts

ELS offers a wide range of coherent (or major) studies within the Bachelor of Science and Bachelor of Arts programs. Detailed information about individual coherent studies can be found under the relevant Department's entry in the sections which follow.

Programs appearing with separate codes in the UAC 2005 Guide are listed below.

- Bachelor of Science in Advanced Biology
- Bachelor of Science in Advanced Chemistry
- Bachelor of Science in Biodiversity and Conservation
- Bachelor of Science with Bachelor of Arts in Museum and Heritage Studies

It is important to note that these are coherent (or major) studies within the Bachelor of Science program and that the name of the coherent study is not part of the title of the award. For example, the Bachelor of Science in Biodiversity and Conservation describes a program of study for which the award will be a Bachelor of Science.

Interdisciplinary studies

The following information relates to degrees and programs of study that are offered by the Division of Environmental and Life Sciences by more than one Department. There are also many degrees and programs offered within individual Departments which are not listed here. Please consult our Departmental entries on the following pages of this handbook.

Bachelor of Environmental Management

The Bachelor of Environmental Management (BEnvMgt) provides interdisciplinary education in the broad field of environmental management, bringing together biophysical and social science perspectives and approaches to environmental issues. It provides a wide range of skills needed to manage complex situations. The program requires three years of full-time study or the equivalent of part-time study. The core units and most of the recommended optional units are available either externally or in a flexible mode of delivery.

Coherent studies

The following program satisfies the requirements for this degree.

Area of Study	Coherent Study	Code
Environmental Sciences	Environmental Management	ENV05
	Environmental Management/Law	LAW13

Academic advice

The core units and many of the optional units are taught within the Division, and in particular by the Departments of Human Geography and Physical Geography. There is, however, scope for students to take units from other Departments and Divisions.

100 level

Core

GEOS114; Plus either (students are strongly advised to take both)

GEOS111 or GEOS117; Plus one 100-level STAT unit or one 100-level COMP or ISYS unit

Options

Generally 12cp (not counted above) from: ABST100; BIOL114; CHEM123; GEOS111; GEOS112; GEOS115; GEOS116; GEOS117; PHYS159; SOC181

200 level

Core

GEOS264; GEOS265

Options

Generally 15cp from: BIOL227; ELS201; GEOS214; GEOS215; GEOS216; GEOS219; GEOS224; GEOS235; GEOS237; GEOS260; GEOS262; GEOS266; GEOS280; GSE200; PHYS220; PHYS243; POL250

300 level (Coherency ENV05)

Core

ELS300; ELS301; GEOS310; GEOS328

Options

At least 4cp, but generally 6–8cp from: BIOL347; BIOL350; GEOS301; GEOS307; GEOS311; GEOS319; GEOS324; GEOS325; GEOS330; GEOS351; GEOS371; GEOS377; GEOS398; GEOS399; GSE300; LAW510

Honours program

Students can do a fourth year of study to obtain the degree BEnvMgt(Hons). The honours year includes both coursework (33% of assessment) and a research thesis (20,000 words and 66% of the assessment). Supervision of the research component is undertaken by appropriate staff in the Division and interested students can discuss options and opportunities with the Program Director.

Bachelor of Environmental Science

The Bachelor of Environmental Science provides a strong scientific education in vital aspects of environmental science with multidisciplinary studies in the biological sciences, chemistry, geology and physical geography. The compulsory core unit, common to all BEnvSc programs of study, is ELS301 Environmental Management Project. ELS301 provides practical experience and is open only to students enrolled in the BEnvSc or the BEnvMgt degrees. The program requires three years to complete (longer for part-time students) and students can tailor a program to suit their needs.

The Bachelor Degree Rules require completion of at least 68 credit points overall, including at least 38 points at 200 level or above, and including at least 34 points at 200 level or above in science units and at least 18 points at 300 level in science units, including a coherent study.

Majors and coherent studies

Area of Study	Coherent Study	Code
Environmental Sciences	Environmental Biology	ENV01
	Environmental Geology	ENV03
	Environmental Physical Geography	ENV04
	Environmental Chemistry	ENV06

Academic advice

Students can select from a wide range of units when constructing their program or choosing a coherent study. For this reason, students are urged to obtain Academic advice when structuring their program. Recommended programs for first year students are:

Environmental Biology

100 level

Core

BIOL114; BIOL115; STAT170 OR STAT171;

Options

6 credit points chosen from: GEOS115; GEOS117; CHEM101; CHEM103

Plus 6 credit points chosen from approved options in Maths, Physics or Computing

Environmental Chemistry

100 level

Core

CHEM101; CHEM103

Options

6 credit points chosen from: BIOL114; GEOS115; GEOS117

Plus 9 credit points chosen from approved options in Maths, Physics, Statistics or Computing

Environmental Geology

100 level

Core

GEOS112; GEOS115; GEOS117

Options

6 credit points chosen from: BIOL114; CHEM101; CHEM103

Plus 9 credit points chosen from approved options in Maths, Physics, Statistics or Computing

Environmental Physical Geography

100 level

Core

GEOS112; GEOS117

Options

6 credit points chosen from: BIOL114; CHEM101; CHEM123; GEOS115

Plus 9 credit points chosen from approved options in Maths, Physics, Statistics or Computing

Honours program

Qualified students may undertake a fourth year of study, which includes coursework and a research project, to obtain the degree of Bachelor of Environmental Science (Honours). Honours can be undertaken within each of the four main discipline areas of the BEnvSc (Geology, Biology, Chemistry, Physical Geography) or may be interdisciplinary. The Division also offers postgraduate degrees and diplomas in a wide range of environmental areas. Further information can be found in the Handbook of Postgraduate Studies.

Bachelor of Marine Science

The Bachelor of Marine Science (BMarSc) provides education and training in key areas of marine science. There are three coherent studies available in the program. The marine biology stream has considerable flexibility, providing students with an understanding of the importance of applying sound theoretical principles to the interpretation of living systems. The marine chemical ecology stream combines sound biological principles with advances in theoretical and applied chemistry. Fields such as sensitive analysis of marine samples and discovering new pharmaceuticals in the sea will be examined. Students in the marine geoscience stream also have many options in their degree program and may specialise in, for example, oceanography or marine geology.

Majors and coherent studies

The following program satisfies the requirements for this degree.

Area of Study	Coherent Study	Code
Marine Science	Marine Biology	MAR01
	Marine Geoscience	MAR02
	Marine Chemical Ecology	MAR03

Academic advice

Recommended units for each of the three streams are as follows:

Marine Biology

100 level

BIOL114; BIOL115; CHEM101 and CHEM103; GEOS116; STAT170 or STAT171; GEOS112; COMP123

Any 100-level unit with the prefix MATH13* or PHYS

200 level

ELS201; BIOL227

Plus 9 cp chosen from 200-level BIOL units especially: BIOL235; BIOL245

Plus 3 cp chosen from 200-level Science units

300 level (Coherency MAR01)

ELS303; BIOL373

plus 9 cp from BIOL3* especially: BIOL368; BIOL369; BIOL372; BIOL374

Plus 3cp from 300 level Science

Marine Chemical Ecology

100 level

BIOL114; BIOL115; CHEM101; CHEM103; GEOS116

At least 6 cp selected from 100-level units with the prefix COMP, GEOS, MATH13*, PHYS or STAT

200 level

BIOL227; BIOL235; CHEM204; CHEM208; ELS201

At least 6 cp from 200-level BIOL units plus 3 cp from: CHEM207 or CHEM234

300 level (Coherency MAR03)

ELS303; BIOL373; CHEM342; BIOL374

Plus at least 5 additional credit points selected from 300-level BIOL and/or CHEM units

Marine Geoscience

100 level

BIOL114; GEOS112; GEOS115; GEOS116; GEOS117; MATH13* 100-level Maths unit; CHEM101

Plus 3 cp from: ISYS114; COMP115

Any other 100-level unit with the prefix MATH13*, PHYS, STAT

200 level

ELS201; GEOS216; GEOS260

Plus at least 10 credit points from: BIOL227; CHEM208; GEOS224; GEOS230; GEOS235; GEOS264; GEOS266; GEOS268; PHYS220

Any 200-level unit with the prefix MATH, PHYS, CHEM

300 level (Coherency MAR 02)

ELS303; GEOS313

Plus at least 12 credit points from: GEOS301; GEOS312; GEOS371; GEOS397; GEOS428

Any other 300-level unit with the prefix MATH, BIOL, CHEM, GEOS

Honours program

Qualified students may undertake a fourth year of study to obtain the degree of Bachelor of Marine Science (Honours). Honours or postgraduate degrees and diplomas in the area of the environment, including marine science, are available either through the Graduate School of the Environment and/or the Departments of Biological Sciences, Chemistry, Earth and Planetary Sciences and Physical Geography. Students interested in pursuing postgraduate study may obtain further information from the Postgraduate Handbook.

Resource and Environmental Management Studies within the BA and BSc

The Departments of Human Geography and Physical Geography offer a comprehensive program of study in resource and environmental management, which includes core units (offered by the Departments of Human and Physical Geography) which are complemented by specialist units from other areas. The program is flexible and allows students to build up considerable specialist expertise in fields as diverse as Aboriginal studies, anthropology, atmospheric science, biology, computing, ecology, economics, geoecology and law, while also developing a broad professional literacy and practical skills across a wide range of biophysical and social sciences. Because the program is so flexible and diverse, employment possibilities are equally wide-ranging. Potential employers include organisations such as the National Parks and Wildlife Service, the Environmental Protection Authority, the Department of Infrastructure, Planning and Natural Resources, catchment management authorities, other federal, state and local government departments, land councils, mining companies and engineering and environmental consulting companies.

Majors and coherent studies

The following programs satisfy the requirements for these degrees, and are currently offered by this Department.

Area of Study	Coherent Study	Code
Resource and Environmental Management	Resource and Environmental Management	REM01 REM02

Academic advice

100 level

Core

GEOS114

Students in the program normally also take

GEOS111; GEOS117; GEOS112

Students should select other 100-level units according to their specific fields of interest.

200 level

Core

GEOS265

Prerequisites for 300-level study in the resource and environmental management program mean that students must take at least one of the following:

GEOS214 or GEOS216; GEOS266; BIOL227 and at least one of the following:

GEOS215; GEOS219; GEOS264; GEOS280

Students choose other 200-level units from a wide range of disciplines in accordance with their interests. In particular, we recommend GEOS237 for those students interested in natural and human-induced hazards, which has

direct synergies with resource and environmental management issues.

300 level

To qualify for a degree with a coherency in resource and environmental management, students must meet three requirements at 300 level. First, they must pass GEOS310 Resource Management and GEOS328 Environmental Management. Secondly, students must pass at least two other units from the following:

GEOS301; GEOS319; GEOS324; GEOS325; GEOS330; GEOS347; GEOS351; GEOS363; GEOS371; GEOS398; GEOS399; GEOS426; ECON359; BIOL347 or BIOL350, LAW310

Thirdly, students must complete a total of at least 18 credit points at 300 level, including those obtained in meeting the first two requirements. Normally this involves passing a further two units. These may be selected from the list of units above, or from any other 300-level units in the Schedule of Undergraduate Units for which the student has the prerequisites.

We strongly advise students aiming to complete the resource and environmental management program, to ensure that they also complete a coherent study in either a physical geography or human geography core degree. For example to complete a coherency at 300-level in human geography, students are required to complete at least ONE of the following in addition to the units listed above:

GEOS215, GEOS219, GEOS264, GEOS280

Geographic Information Science within the BA and BSc

The Departments of Physical and Human Geography run the coherency in Geographic Information Systems (GIS). Study in GIS within a Bachelor of Science degree is appropriate for students who wish to combine studies in the field of GIS, with studies in environmental science, resource and environmental management, geography, geology, biology or computing science. Study within a Bachelor of Arts degree is appropriate for students who wish to combine studies in GIS with studies in business operations, planning and development, health and population studies and marketing.

The program structure for a coherent study in GIS is designed to be flexible. In each year there are some essential units, some recommended units and students are able to choose other units according to their individual interests. Students undertaking coherent study in GIS are highly recommended to include other geographical/environmental units in their program each semester, to ensure a good understanding of how GIS can be applied. In general, students are also recommended to complete units in computer science in the first and, where possible, second years, as these complementary skills are well regarded in the work place.

First Year

Core

Any 100 level COMP, ISYS or STAT unit.

Recommended

Geography and other environmentally based sciences (choose at least two):

GEOS117, GEOS112, GEOS114, GEOS111, GEOS115, BIOL114

Supporting studies in computer science and statistics (choose at least one):

COMP115, COMP114, COMP123, COMP125, STAT170, STAT171

Second Year

Core

GEOS264, GEOS371

Recommended

Geography and other environmentally based sciences (choose at least two):

GEOS265, GEOS266, GEOS237, GEOS219, GEOS262, GEOS251, GEOS268, BIOL227, BIOL235

Note that units at second year need to be chosen carefully to provide the 200-level prerequisites for 300-level units

Supporting studies in computer science:

COMP224, COMP225, COMP249

Third Year

Core

GEOS426

Plus at least two of the GEOS, BIOL or COMP units listed below.

Recommended

Geography and other environmentally based sciences (choose at least two):

GEOS310, GEOS328, GEOS398, GEOS399, GEOS319, GEOS330, GEOS351, GEOS307, GEOS420, BIOL347, BIOL349, BIOL363

Supporting studies in computer science:

COMP326

These notes are intended to guide selection and students should seek academic advice.

Graduate Programs in the Division Graduate Certificate in Biotechnology

The Graduate Certificate in Biotechnology will provide a substantial practical basis for graduates who are seeking to enrol in the Master of Biotechnology or the Master of Biotechnology/Master of Commerce and who do not have a relevant science background. The program

requires completion of 13 credit points which involves full-time study over one semester. The units required are:

BIOL224; BIOL377; PHIL260

Plus one unit selected from the following options

BIOL371; CHEM340 or CHEM341; CHEM208

Graduate Diploma in Atmospheric Science

Candidates for the Graduate Diploma in Atmospheric Science must have a Bachelor degree or equivalent with a major study in physical geography, climatology, meteorology, environmental science, earth sciences, physics, biology, geophysics, chemistry or mathematics. The program for the Graduate Diploma in Atmospheric Science embraces a wide range of topics in climatology and meteorology, including climate change, air pollution, boundary layer meteorology, biometeorology, inclement weather and weather forecasting.

The program of study requires satisfactory completion of GEOS216, and 12 credit points from GEOS301, GEOS313, GEOS325, and GEOS328.

Applications must be lodged by the end of September, however late applications will be accepted up until mid-December with the payment of a scaled late fee. Application forms and advice regarding fees can be obtained from the Undergraduate Studies Section, Lincoln Building, Macquarie University, NSW 2109, telephone (02) 9850 7314.

Graduate Diploma in Geographic Information Science

The Graduate Diploma in Geographic Information Science is a part-time program for local and overseas students with a degree who wish to study Geographic Information Sciences (GIS). The program can be completed in 18 months if commenced in Semester 1 or two years if commenced in Semester 2. At least 24 credit points in GEOS or COMP units must be obtained of which at least 18 credit points must be at 200 level or above, including: GEOS264 Geographic Information Systems; GEOS371 Geographic Information Systems: Technical Issues; and GEOS426 Geographic Information Systems (GIS) Applications. Students without suitable computing units in their first degree must also undertake: COMP114 Introduction to Information Systems; COMP115 Introduction to Computer Science; and COMP224 Database Systems.

Previous undergraduate units cannot count for credit and each student's program of study must be approved by the Director of the GIS program, Dr M Poulsen. Applications for Semester 1 close at the beginning of September and for Semester 2 at the beginning of June. The Diploma attracts a tuition fee which is set each year. Application forms and advice regarding fees can be obtained from the Undergraduate Studies Section, Lincoln Building, Macquarie University, NSW 2109, telephone (02) 9850 7314.

Honours in the Division of Environmental and Life Sciences

Honours programs are one year full-time or two years part-time commenced on completion of a normal degree program. It is expected that candidates applying for entry to the Honours program should have completed at least 18 credit points in relevant units at 300 level and/or 400 level and obtained a Grade Point Average of 2.5 both overall and at 300 level and/or 400 level. Applicants who do not satisfy these requirements are eligible to apply for the special approval of the Dean of Division or a delegated authority such as the Head of the relevant Department.

Honours programs have two interrelated objectives: firstly, to provide a student with the opportunity to undertake supervised research in a chosen area of interest; and second, to enhance academic qualifications and general experience for employment purposes. Students interested in undertaking an Honours program should discuss opportunities with a member of academic staff at or before the beginning of their third year of study.

For further department specific information on honours programs students are advised to consult Departmental entries in this Handbook.

Fieldwork in the Division of ELS

A significant number of units have compulsory fieldwork components. The location and duration of each period of fieldwork are given in the relevant unit description in the section entitled "Descriptions of Undergraduate Units" in this Handbook.

Please note that some fieldwork can be remote and relatively physically demanding. If health issues exist that may affect a student's capacity to undertake fieldwork, this should be discussed with the unit convenor or Head of Department as early as possible.

Bachelor of Science/Bachelor of Arts with a Diploma of Education Science teaching

Students who are taking the combined BSc or BA DipEd program and wish to satisfy the NSW Department of School Education requirements for promotion should carefully consult the Teacher Education Program Student Guide. For further information please contact Ms Dale Scott in the Division of Environmental and Life Sciences via e-mail at dale.scott@mq.edu.au or by phoning the ELS Centre on (02) 9850 6000. Discipline specific teacher training information is also located in the Departmental entries which follow.

Transfer between courses

Any student wishing to transfer enrolment to another degree must meet the requirements set out in Part 1 of this Handbook, and a Request to Transfer Degree Course form must be completed.

Division of Environmental and Life Sciences enquiries

Room: E7A Ground Floor
 Phone: +61 2 9850 6000
 Fax: +61 2 9850 6565
 Email: enquiries@els.mq.edu.au
 Website: www.els.mq.edu.au

DEPARTMENT OF BIOLOGICAL SCIENCES

The Department of Biological Sciences offers units for the following pass and honours degrees:

Bachelor of Science
 Bachelor of Medical Sciences
 Bachelor of Marine Science
 Bachelor of Environmental Management
 Bachelor of Environmental Science
 Bachelor of Science with Bachelor of Arts
 Bachelor of Arts.

Note that there are a number of specialised programs available under the BSc, the details of which can be found later in this section. Note also that the BSc and BA degrees can be combined with other qualifications such as the Diploma of Education (DipEd) and the Bachelor of Laws (LLB).

The units are designed to introduce the student to a study of living organisms firmly based on theoretical principles, and to teach the student to understand and to deduce rather than to learn a mass of biological facts.

The range of units available is such that by choosing an appropriate combination a student may develop either specialised or broad interests in biology. Provisions are made for students who want to specialise in one of the biological disciplines available in the Department as well as for those whose interests in biology are general. Provision is also made for students whose main interests are in fields of study offered by other Departments in the University.

Students may do an honours course in selected aspects of the major biological disciplines. Those who wish to become professional biologists are strongly advised to complete an honours degree.

Distance Education Program

Part-time evening programs are not available in biological sciences but the Department is actively involved in the University's distance education program. In 2005, 57 credit points in biology are available externally at 300 level.

The Department of Biological Sciences strongly advises that the first two years of external enrolment should generally involve the completion of 100-level science, including mathematics-physics-chemistry-biology, and that the third and fourth years of enrolment should be substantially devoted to the completion of appropriate 200-level science units, before 300-level units are studied. Unless this advice is followed, there may be prob-

lems associated with timetabling which will seriously restrict the choice of units available. Note that mathematics units are not available in the external mode but may be available in evening mode.

Bachelor of Science/Bachelor of Arts

Students wishing to enrol in either the Bachelor of Science or the Bachelor of Arts may already have studied science and mathematics at school or wish to commence these studies at university. Units of study are available for students at both of these levels of entry. Many units offered within the Department can be taken either as internal or external units, and the degree may be taken on a full time or part time basis. Students entering with sufficient background (school) studies who pursue their degree full time can expect to complete in a minimum of three years.

Students undertaking the Bachelor of Science or Bachelor of Arts are referred to the particular requirements of the BSc or the BA Rules when deciding on their program of study in biology and related science subjects.

Majors and coherent studies

The following programs satisfy the requirements for these degrees, and are currently offered by this Department.

Area of Study	Coherent Studies	Code
Biology	Biology	BLG04
	Biology	BLG05

Academic advice

Practical work is compulsory. Practical classes may take the form of weekly sessions as listed in the Class Timetable, or of block sessions (called on-campus sessions in the External Science Program). In some units both formats are conducted; the Head of Department may recommend a variation to the normal mode of attendance for a student. Such attendance is described as 'composite', and in the Schedule of Undergraduate Units the symbol 'c' is used to denote units taught in the composite mode.

The units BIOL114 and BIOL115 constitute first-year biology and normally a student takes both of these units, for the separate parts are not separate options. The first-year combination of mathematics-physics-chemistry with biology is a common one. Units in chemistry, mathematics and physics are strongly recommended and for some students are mandatory. The non-biological subjects are necessary for an understanding of biology. It is important in first year that students enrol in a background of study which will permit them to change their orientation as their interests develop.

BIOL108 is for students whose major interests are not biological; however students who have passed the unit at a satisfactory level together with other science and/or non-science units, may continue with a limited selection of 200-level units with the prefix BIOL.

A number of units relating to a variety of topics are available at 200 level (see Schedule of Undergraduate Units for details).

For some of the 300 level electives there will be a preferred background of study outside the Department of Biological Sciences of which the student should be aware. More detailed information is available on the Department's web page www.bio.mq.edu.au/

100 level

The units in which a student enrolls will depend upon the HSC subjects and results. Students with relatively little HSC science should select a program of 20 to 25 credit points from the following: BIOL114; CHEM101; GEOS112; MATH130; BIOL115; CHEM103; GEOS114; GEOS115; GEOS116; GEOS117; STAT170; PHYS159

Students with more advanced HSC mathematics and science should select a program of 24 or 25 credit points from: BIOL114; GEOS112; CHEM101; MATH130 or MATH135; PHYS140; STAT170 or STAT171; BIOL115; GEOS114; GEOS115; GEOS116; GEOS117; CHEM103; MATH131 or MATH136; PHYS143 or PHYS159

All students enrolled in the Department of Biological Sciences are strongly urged to complete CHEM101 and CHEM103 and PHYS159. All students should take the unit STAT170 before the second half of their second year: STAT170 or STAT171 is a corequisite of BIOL206 Genetics, and a prerequisite of BIOL227 Ecology.

Honours program

Honours programs in biological sciences are undertaken by two types of students. Some wish to complete their undergraduate training, prior to entering the work force, by doing their own research. Others wish to prepare themselves for postgraduate work. Our program is designed to cater for both ambitions.

Our Honours year is different from that offered by many universities. Rather than doing a single research project, our candidates undertake a separate project in each of the two semesters. We also offer the possibility of undertaking a single project over both semesters, as some research projects cannot be achieved in a single semester.

In addition, the Honours class meets as a group each semester, under the guidance of senior academics, to participate in intensive seminar/discussion/review-writing sessions called Theme Topics.

Students who are considering Honours are strongly advised to include BIOL235 Biostatistics in their undergraduate course.

For further information and a list of potential Honours projects, please visit the Departmental web site <http://www.bio.mq.edu.au/pgrad/honours/index.html> or contact the Honours Convener, Dr Marie Herberstein.

Advanced Biology program

Students with a UAI of at least 95 may be admitted to the Advanced Biology Program. The program offers contact with leading researchers across the full range of disciplines from molecular biology through physiology, genetics, biodiversity and ecology.

Students in the Advanced Program have access to special small-group tutorials during first, second and third year, discussing recent research advances with leading faculty members. For the remainder of their coursework, they will be encouraged to maintain diverse interests as well as to master fundamentals across a range of biological subjects. Subjects such as languages, philosophy or psychology, as well as other sciences such as physics or climatology can be included in the program. For students in the Advanced Program, the Department would often be willing to waive some prerequisites to enable a more interesting program of study to be constructed. Every effort will be made to arrange vacation employment with research teams for Advanced Program students wanting the direct experience of research.

Area of Study	Coherent Study	Code
Biology	Advanced Biology	BLG06

Most Advanced Biology students will wish to take a fourth, Honours, year which gives the opportunity to attempt two research projects.

Biodiversity and Conservation program

Issues in biodiversity and conservation encompass many disciplines. Individual students may wish to construct a personalised program, tailored to their developing career aspirations. In addition to the recommended program, students are therefore encouraged to consider, and seek Academic advice about, taking units in areas such as chemistry, demography, earth sciences, economics, information systems and politics.

The prescribed units for the completion of the program are as follows:

100 level

At least 6 credit points in 100-level Biology

At least 3 credit points in any unit with the prefix GEOS

At least 3 credit points in any unit with the prefix STAT

200 level

BIOL206; BIOL208; BIOL227; BIOL235

Plus either: BIOL210 or BIOL215

300 level

BIOL390; BIOL374

Plus 3 units from the following: BIOL313; BIOL316; BIOL317 (not offered in 2005); BIOL334; BIOL347 (not offered in 2005); BIOL350; BIOL360; BIOL368; BIOL369; BIOL372; BIOL373; BIOL377

Suitably qualified candidates may participate in both this program and the Advanced Biology program.

Majors and coherent studies

The following programs satisfy the requirements for this program, and are currently offered by this Department. Most students will wish to take fourth, Honours, year to give them direct experience in research,

Area of Study	Coherent Studies	Code
Biodiversity & Conservation	Biodiversity & Conservation	BDV01

Bioinformatics program

Bioinformatics is offered as an area of study for a Bachelor of Science aimed at training computer-literate biologists in bioinformatics, the growing new discipline of analysis by computer of the very large databases being generated in several areas, such as the human genome project and biodiversity. Careers will be available in sequencing centres, research/academic institutions, pharmaceutical/agrochemical companies, software houses and start-up companies.

All students complete a common 100-level program, which includes core units in biology, chemistry, computing and statistics. Many of the remaining required units will be specified by default as prerequisites for the 300-level units in the various coherent studies. It is expected that students will begin to tailor their program towards one or more coherent studies in second year.

100 level

Core

ISYS114; COMP115; BIOL114; BIOL115; CHEM101; CHEM103; STAT171 or STAT170

200 level

Core

COMP224; BIOL206; STAT273

In addition to these core units, there are specific coherent studies, presented below

Majors and coherent studies

The following programs satisfy the requirements for this area of study, and are currently offered by this Department.

Area of Study	Coherent Studies	Code
Bioinformatics	Genomics	BNF01
	Biodiversity/Ecology	BNF02
	Molecular Analysis	BNF03
	Information Processing and Data Mining	BNF04

Entry requirements

Entry is restricted to those with an assumed knowledge of at least HSC mathematics and chemistry. Entry without HSC studies in these two areas is possible, but the degree will extend beyond three years.

Biotechnology program

Biotechnology is offered as an area of study for a Bachelor of Science. Students will be expected to have particular interests in molecular sciences and chemistry.

It is recommended that in their first year students enrol in BIOL114 and BIOL115, CHEM101 and CHEM103 and at least 3 credit points each of STAT and PHYS units. Recommendations for further units of study are available from the Department of Biological Sciences.

Students who have reached a high level of achievement in their Bachelor degree are encouraged to take a fourth, Honours year.

Majors and coherent studies

The following programs satisfy the requirements for this area of study, and are currently offered by this Department.

Area of Study	Coherent Studies	Code
Biotechnology	Biotechnology	BTC01

Bachelor of Medical Sciences

This Degree is designed to provide for those with interests in medical, biomedical and allied health sciences. Careers in those areas and associated disciplines will be available to graduates in both government and private sectors.

All students complete a common 100-level program that includes units of biology, chemistry, psychology, mathematics, physics and statistics to a total of 27 credit points. One or more of these units may be deferred to the second year. Students are encouraged to seek Academic advice on this matter.

At the end of the first year, students elect one of the strands — Biomedical, Medical Chemistry, Psycho-medical Sciences — and continue the degree in that strand to completion in the next two years. Students electing to take the Biology strand may choose units in biochemistry, genetics, microbiology and zoology, with further options in a wide range of subjects drawn from such areas as chemistry, psychology and statistics. In the third year selected areas from second-year studies are extended and new areas such as physiology and immunology may be introduced.

100 level

Core

BIOL114; BIOL115; CHEM101 and CHEM103; MATH130 or MATH135; PHYS149; PSY104; PSY105; STAT170 or STAT171

Students electing to take the Biology strand choose 200-level units which will enable the completion of 24 credit points from the 300-level units listed by Academic Senate. BIOL223 and BIOL224 are recommended core units.

200 level

A 200-level program which allows for adequate choice at 300-level can be constructed from:

BIOL206; BIOL208; BIOL215; BIOL223; BIOL224; BIOL235; BIOL246; CHEM204; PSY236

300 level

BIOL309; BIOL371 (*alternates with BIOL309*); BIOL334; BIOL345; BIOL346; BIOL352; BIOL357; BIOL358; BIOL375

An additional 9 credit points must be taken from 300 level Medical Science units. These may be taken from the list above but can also include: BIOL316; BIOL369; BIOL377; CHEM342; STAT395; PSY321; PSY324

See the Department of Chemistry for details of the Bachelor of Medical Science *Medical Chemistry strand*, in this section of the Handbook. Details of the Bachelor of Medical Science *Psychomedical strand* will be listed under the Department of Psychology, Division of Linguistics and Psychology.

Majors and coherent studies

The following programs satisfy the requirements for this degree, and are currently offered by this Department.

Area of Study	Coherent Studies	Code
Medical Sciences	Biomedical	MED01

Entry requirements

Entry to the Bachelor of Medical Sciences assumes knowledge of HSC 2 unit Mathematics (Band 2 or above). Students with no HSC Chemistry and minimal Mathematics can take units at first-year level which will enable them to acquire the above assumed knowledge. Entry without HSC studies in these two areas is possible, but the Degree will extend beyond the normal three years.

Honours Program

Students who have reached a high level of achievement in the Bachelor of Medical Sciences are encouraged to take a fourth, Honours year. The structure of the Honours program varies in the three strands of the degree. In the Biomedical Strand, the program usually comprises two theme topics relevant to the Medical Sciences, one research project conducted in the Department of Biological Sciences and one conducted in a medical research institute.

Bachelor of Marine Science

The Department of Biological Sciences contributes to the teaching of this program. Please refer to the Divisional entry under “Interdisciplinary studies” for more detailed information.

Bachelor of Environmental Management

The Department of Biological Sciences contributes to the teaching of this program. Please refer to the Divisional entry under “Interdisciplinary studies” for more detailed information.

Bachelor of Environmental Science

The Department of Biological Sciences contributes to the teaching of this program. Please refer to the Divisional

entry under “Interdisciplinary studies” for more detailed information.

Bachelor of Science with Bachelor of Arts**Museum Studies and Heritage Program**

The Department of Biological Sciences contributes to the teaching of this program. Please refer to the entry of the Department of Earth and Planetary Sciences for full details.

Bachelor of Arts or Bachelor of Science with Diploma in Education

Students undertaking the combined BADipEd or BScDipEd who intend to become secondary biology teachers should refer to the *Teacher Education Program Student Guide* or consult an academic adviser in Biological Sciences.

Graduate Certificate in Biotechnology

The Department of Biological Sciences contributes to the teaching of this program. Please refer to the Divisional entry under “Interdisciplinary studies” for more detailed information.

Units at Other Universities

Students may enrol concurrently in units at other universities under certain conditions. Usually they do so when units are a desirable addition and complement to their studies at Macquarie University but are not available here. A listing of units already approved for such study is available from the Student Information Centre, and enrolment in these is relatively straightforward; where units have not been approved, enrolment is more complex. Students should seek advice from staff involved in the specific area of interest, and from the Officer for Undergraduate Studies within the Department. It should be clearly understood that approval of enrolment is not automatic, and that it is the responsibility of the student to make the necessary arrangements with both Macquarie and the other university, and such arrangements must be completed in the year before that in which the units are to be taken.

Programs and Units

Approved programs of undergraduate study (Majors and coherent studies) are listed in the section of this Handbook entitled “Schedule of Undergraduate Programs”. The units of undergraduate study are listed in the “Schedule of Undergraduate Units”, and brief descriptions are given in the section entitled “Descriptions of Undergraduate Units”.

Recommended Programs for Students in Other Departments

Provided prerequisites are satisfied, students registered in other Departments may take particular 100-level, 200-level and 300-level units from those offered by the

Department of Biological Sciences to make up their own programs of study.

Department of Biological Sciences enquiries

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DEPARTMENT OF CHEMISTRY

The Department of Chemistry offers units for the following pass and honours degrees:

Bachelor of Science

Bachelor of Marine Science

Bachelor of Medical Sciences

Bachelor of Environmental Science

Bachelor of Arts

Please see below for a list of specific coherent (or major) studies offered by the Department. Note also that the BSc and BA degrees can be combined with other qualifications such as the Diploma of Education (DipEd) and the Bachelor of Laws (LLB).

The Department of Chemistry caters for students with a variety of entrance backgrounds and career aspirations, including those who aim to become professional chemists and those who recognise that chemical insight is vital to many other fields of science, industry, environmental studies, business, and general community interest.

Students majoring in chemistry and biochemistry have a choice of either specialising in chemistry up to an advanced level or combining a chemistry major with 300-level studies in biology, environmental science, or in other science disciplines. Apart from the generic Bachelor of Science (BSc) and Bachelor of Arts (BA) degrees, there are a number of more specialised degrees in which chemistry plays a significant role. Some of these specialised degrees, Bachelor of Medical Sciences, and Bachelor of Environmental Science have rigidly prescribed course structures.

Distance Education Program

The 100-level units CHEM101, CHEM103, CHEM123 are offered externally every year. CHEM234 is also offered externally. Full details of the external program are set out in the External Students' Guide, available from the Centre for Open Education.

Bachelor of Science/Bachelor of Arts

The Bachelor of Science course offers the greatest flexibility and diversity of all the degree programs offered by the Department, as not only science but specially designated arts and humanities subjects can be counted towards the degree.

To qualify for the BA or BSc a student must complete successfully an approved combination of units above 200 level. Any such combination must have been certified by Academic Senate to provide a substantial and coherent study at that level.

Academic advice

For students taking a full chemistry major, the preferred entrance background is HSC Chemistry and Mathematics. An additional HSC science subject such as Physics or Biology is advantageous, but not essential. Students should enrol at 100 level in the two core units CHEM101 Introductory Chemistry A and CHEM103 Introductory Chemistry B (taken in either order). More specific details are as follows:

For most chemistry major students, the remaining program at 100 level will comprise a selection of other units with prefixes such as BIOL, COMP, ELEC, GEOS, MATH, PHYS and STAT, corresponding to the particular pattern of study that they intend to pursue. This selection of 100-level units should provide the necessary prerequisites for subsequent 200- and 300-level units consistent with the above coherent study options. The humanities-style unit CHEM123 Chemistry in the Human Environment is another option.

200 level

At 200 level, chemistry major students usually need to enrol in each of the following three CHEM units: CHEM204, CHEM207 and CHEM208. They are strongly advised to support these units with further studies in biology, computing, earth sciences, electronics, mathematics and/or physics. CHEM234 is another option.

300 level

Students may choose a total of up to 20 credit points' worth of 300-level CHEM units, as follows: CHEM325, CHEM329, CHEM332, CHEM340, CHEM341 and CHEM342. Note that CHEM340 and CHEM341 are offered only in alternate years, so that careful planning is required if they are both to be included in a three-year degree program. Students with a strong interest in the biological aspects of chemistry should consider including BIOL309, BIOL352 and BIOL371 (and possibly also BIOL357 and BIOL375). Moreover, students with other interests will find many opportunities to combine 300-level CHEM units with relevant 300-level units offered by other disciplines.

Honours program

The BSc Honours program in Chemistry consists of a full year research project, carried out under the guidance of one or more supervisors. Potential candidates are free to choose their preferred area of research from a list of projects prepared each October by Departmental staff members. Research findings are presented in a written report. Each Honours student normally presents two Departmental seminars on their selected research topic. In addition, there are two units of coursework that include a variety of research-level topics. Honours Scholarships (\$5000) are awarded to Australian students

with a BSc (or equivalent) in Chemistry and a GPA of 3.8 (or better). The Honours program is best attempted full-time. Honours may be undertaken part-time if full-time employment or other reasons prevent full-time attendance. However, some projects may not be practicable on a part-time basis. Both full-time and part-time programs may be started mid-year.

Majors and coherent studies

The following programs satisfy the requirements for these degrees and are currently offered by this Department.

Area of Study	Coherent Study	Code
Chemistry	Chemistry	CHE01, CHE09
	Advanced Chemistry	CHE22
	Biological Chemistry	CHE02
	Chemistry with Mathematics & Computing	CHE03, CHE07
	Geochemistry	CHE04, CHE10
	Chemistry with Physics	CHE08
	Molecular Design	CHE17
	Molecular Analysis (Biomolecular Analysis)	CHE18
	Molecular Analysis (Chemical Analysis)	CHE19
	Molecular Analysis (Environmental Analysis)	CHE20

Advanced Chemistry Program

Students are admitted to the Advanced Chemistry Program on the basis of a high UAI (at least 95), together with HSC Chemistry, or their equivalents.

In addition to the standard BSc program, students must enrol in three specialist units, CHEM112 and CHEM113 (each worth 1 credit point) at 100 level and CHEM388 (worth 1 credit point) at 300 level. These units cover material designed to build strong foundations for research and to develop insight into the chemical profession. Students in the program are also given the opportunity to participate in the research of the Department from their first year on and will be encouraged to take Honours where possible. Please refer to Coherent Study coded CHE22 for further details on the degree requirements.

Any Chemistry major student with a high grade point average (at least 3.5) may, at any time before they commence their final year of BSc studies, apply to enter the Advanced Chemistry Program. Enquiries should be addressed to the Head, Department of Chemistry.

Biotechnology

Biotechnology is offered as an area of study for a Bachelor of Science. Chemistry is the basis of Biotechnology so students will have a particular interest in the molecular sciences. It is recommended that first year students enrol in CHEM101, CHEM103, BIOL114 and BIOL115 and at least 3 cp from each of MATH and

PHYS units. Recommendations for further study are available from the Department of Chemistry.

Bachelor of Medical Sciences

The Department of Chemistry contributes to the teaching of this program. Please refer to the Divisional entry under “Interdisciplinary studies” for more detailed information.

Bachelor of Environmental Science

The Department of Chemistry contributes to the teaching of this program. Please refer to the Divisional entry under “Interdisciplinary studies” for more detailed information.

Bachelor of Marine Science

The Department of Chemistry contributes to the teaching of this program. Please refer to the Divisional entry under “Interdisciplinary studies” for more detailed information.

Professional accreditation

Students completing the requirements for most of the BSc coherent study prescriptions will be eligible to apply for membership of the Royal Australian Chemical Institute Incorporated (RACI Inc.) and to attain the title of Chartered Chemist. The Department of Chemistry is prepared to give advice concerning appropriate choices of units to achieve this objective.

Academic advice

For some 200 and 300 level units, such as CHEM207, CHEM325 and CHEM329, it is recommended to students that they should have successfully completed 100-level MATH and PHYS units such as MATH135 or MATH136 and PHYS140 or PHYS143 or PHYS149. However, these are no longer formal prerequisites, although they are specified as part of some degree programs such as BSc in Molecular Technologies. Moreover, students seeking Professional accreditation by RACI Inc. (see above) require a foundation of 100-level MATH and PHYS units. The Department of Chemistry offers special assistance to students who lack assumed knowledge in mathematics or physics.

Bachelor of Science with Diploma of Education

Students planning a science teaching career should include as much chemistry as possible. Students undertaking the concurrent Bachelor of Science with Diploma of Education (BSc DipEd) course should take the standard 100-level science program and should not start education units until their second year. Full details of course requirements are set out in the Teacher Education Program Student Guide.

Programs and Units

Approved programs of undergraduate study (majors and coherent studies) are listed in the section of this Handbook entitled Schedule of Undergraduate Programs. The units of undergraduate study are listed in the Schedule of Undergraduate Units, and brief descriptions

are given in the section entitled Descriptions of Undergraduate Units.

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DEPARTMENT OF EARTH AND PLANETARY SCIENCES

The Department of Earth and Planetary Sciences offers units for the following pass and honours degrees:

Bachelor of Arts;
Bachelor of Environmental Management;
Bachelor of Environmental Science;
Bachelor of Marine Science;
Bachelor of Science;
Bachelor of Technology (Exploration Geoscience);
Bachelor of Science with Bachelor of Arts.

Note also that the BSc and BA degrees can be combined with other qualifications such as the Diploma of Education (DipEd) and the Bachelor of Laws (LLB).

Earth and Planetary Sciences include studies of the earth, its evolution and relation to other planets. At Macquarie these studies are encompassed in the disciplines of geology, geophysics and palaeontology and one unit in astrophysics. The Department has a strong commitment to maintaining an emphasis on fieldwork and providing students with access to the most advanced laboratory facilities and field equipment. More extensive details and advice on unit (subject) selection is available on the Departmental web site at <http://www.es.mq.edu.au/geology/paths.htm>

Graduates have a vital role in the exploration for, and assessment and development of, Australia's mineral and fossil fuel resources and are also employed in the mining industry, major construction companies, financial institutions, stockbroking firms, industry, government departments, museums and scientific organisations such as CSIRO.

Geophysics is the study of the earth using the methods of physics. Solid earth geophysics involves the study of the structure of the earth's interior, and the study of physical processes within the earth which result in phenomena such as earthquakes and geomagnetic field reversals. Applied geophysics involves the application of geophysical techniques (including gravity, magnetic, seismic, electrical and radiometrics) in the search for economic deposits of minerals, coal, oil and gas and in the application of those techniques to environmental problems. Geophysics now finds increasing application in resolving problems in engineering, groundwater and environmental applications.

Palaeontology, the study of ancient life in its evolutionary and environmental context, has close linkages with

biological sciences and the sedimentary areas of geology. Palaeontology has various roles in geological mapping, an often pivotal role in the search for oil and gas, and even collaborative roles in archaeology. Because palaeontology documents the history of life through pre-history as well as "deep time", palaeontologists are often employed in museums.

Astrobiologists at Macquarie focus on the very beginnings of life on the Planet as well as the search for evidence of life elsewhere in the Solar System.

Distance Education

At present all 200 level units required as prerequisites for 300-level and 400-level units are available externally at least every second year. Most involve both "on-campus" sessions and fieldwork. Candidates should examine the coherent studies cited to work out the best unit pattern to adopt. The 300 and 400 level units required to complete a coherency in Geology or Palaeobiology (GEOS307, GEOS312, GEOS397, GEOS425, GEOS427, GEOS428, GEOS437) are offered externally on either an annual or biannual basis but students must be able to attend the fieldwork components. The introductory units of study at 100 level give first an integrated view of the earth (GEOS112) and then a more specific view of its dynamics and the materials it is made of (GEOS115). Field work is an integral part of this introduction, culminating in a field camp (GEOS224) at the end of the first year. Students are advised to also take 100 level units in BIOL, CHEM, COMP or ISYS and STAT.

Academic advice

There are no formal HSC subject requirements for students undertaking the BA or BSc degrees offered by the Department.

100 level

It is important that students take GEOS115 and it is advised that students also take GEOS112 and GEOS116 (Marine Geoscience — this unit is required for a Bachelor of Marine Science degree). A selection of other 100-level BIOL, CHEM, GEOS, MATH, PHYS and STAT units is encouraged. If students wish to minimise the number of other science units, then their selection should reflect their field of particular interest. For Palaeontology, it is BIOL and STAT units that are the most appropriate. For Geophysics, MATH and COMP or ISYS units are advised. For Geology, GEOS117 Biophysical Environments and CHEM units are suggested. For students who have not taken any of these other science subjects at HSC, there are bridging units in Chemistry, Maths and Physics. Biology allows entry to most 100 level units without HSC Biology. Not all these 100-level units need to be taken in the first year.

200 level

The first 200-level unit for most students is GEOS224, a vacation fieldwork unit that runs in December of each year. Entry to this unit is via GEOS115, GEOS116 or GEOS117. GEOS230 and GEOS260 lead into the main 300-level units in Geology. GEOS235 leads into 300-

level Palaeontology and Palaeobiology, although there are alternate entry points from BIOL units. GEOS268 leads into 300-level Geophysics and is also taken by most Geology students. Because of the alternation of GEOS315 and GEOS316, it may be necessary for Geophysics students to take one of these units in the second semester of their second year. GEOS428 Coral Reef Dynamics (available to 300 level students) is a fieldwork unit operated at Heron Island each year. GEOS373 is offered only in odd years with a field trip to New Zealand in February.

GEOS251 and GEOS272 are general interest units designed for students whose interests may lie outside the main Earth and Planetary Science programs. GEOS272 is necessary for students taking the Museum and Heritage Studies program for the BSc with BA.

For the requirements for the Bachelor of Marine Science degree, the Bachelor of Environmental Science degree and the Bachelor of Technology in Exploration Geoscience please see the appropriate section of the Divisional entry and the study pattern. For more details on all the programs offered by the Department of Earth and Planetary Sciences please consult the web site listed above.

Majors and coherent studies

The Bachelor Degree Rules require, among other things, at least 18 credit points (for the BSc they must be science designated) in units at 300 level or above, including an approved combination such as the ones set out below. Students are permitted to take all of the 18 credit points, and more, within their Division of registration. The coherent combinations listed below are approved for either the BA or the BSc degree.

Area of Study	Coherent Studies	Code
Environmental Sciences	Environmental Geology	ENV03
Geology, Geophysics & Exploration Geoscience	Geology	GGE01, GGE05
	Geology and Geophysics	GGE02, GGE06
	Palaeobiology	GGE03, GGE07
	Geophysics	GGE04, GGE09
	Geochemistry	GGE08
Marine Science	Environmental Geology	ENV03
	Marine Geoscience	MAR02

Bachelor of Science or Bachelor of Arts with Diploma of Education

Students undertaking the combined BA DipEd or the BSc DipEd who intend to become secondary school teachers and wish to specialise in the teaching of geology should enrol in the Department of Earth and Planetary Sciences. The student is referred to the appropriate *TEP Student Guide*, which is available each year as part of the Teacher Education Program.

Honours program

Honours students will be required to undertake both units of study and supervised research in a field appropriate to staff expertise in the appropriate field of study. Interdisciplinary research is also encouraged. The research component comprises two-thirds of the honours year and the units of study are chosen in consultation with the supervisor and Departmental honours committee. Students are strongly encouraged to undertake an Honours program as this greatly enhances their employment prospects. Honours students in geology and geophysics have the opportunity to participate in active research in the department as well as participate in the extensive research program being undertaken in the ACA, GEMOC and MUCEP Research Centres.

Bachelor of Environmental Science

The Department of Earth and Planetary Sciences contributes to the teaching of this program. Please refer to the Divisional entry under "Interdisciplinary studies" for more detailed information.

Bachelor of Environmental Management

The Department of Earth and Planetary Sciences contributes to the teaching of this program. Please refer to the Divisional entry under "Interdisciplinary studies" for more detailed information.

Bachelor of Science with Bachelor of Arts

Museum Studies and Heritage Program

This program combines a scientific and arts education with added undergraduate experience in museum studies and exposure to museum practice. This interdisciplinary 4-year program of study (at least 96 credit points) is designed in order that students will qualify with coherencies in at least three areas of study, and with a modern background in the field of museum studies. The Bachelor Degree Rules require, among other things, at least 18 credit points above 200 level to be completed in Science units.

Majors and coherent studies

The following program satisfies the requirements for this degree.

Area of Study	Coherent Studies	Code
Museum Studies	Palaeontology	MST01

Honours program

Qualified students may undertake a fifth year to obtain the degree of Bachelor of Science with Bachelor of Arts in Natural Resources, Cultural and Museum Studies (Honours). Students in the Honours program will undertake a research project in the Department of their choice, either History, Human Geography, Biological Sciences, Earth and Planetary Sciences, Early Childhood Studies or Indigenous Studies. In conjunction with a museum (on

campus or externally) students will create an exhibition or display (static or digital) on the topic researched, or instigate another museum-based program commensurate with their research focus. In addition, up to 8 credit points of relevant units may be completed. Students who have already completed an appropriate BA or BSc at Macquarie or another university will be considered for enrolment in Honours in Museum Studies and will complete a similar program as that outlined above.

Postgraduate Study

From 2005 the Division will offer two postgraduate programs in Museum Studies, the Master of Museum Studies and the Postgraduate Diploma in Museum Studies. Full details of these programs are available in the 2005 Handbook of Postgraduate Studies.

Bachelor of Technology (Exploration Geoscience)

Two strands are structured: Geochemistry and Geophysics. 100-level requirements are common to both strands. For completion within three years it is expected students will have HSC chemistry or physics and maths. An optional Honours Year will follow from both strands. This degree is designed for students with above average abilities in chemistry or maths and physics who wish to obtain the highest level of expertise in either exploration geochemistry or exploration geophysics. It is expected that most of the graduates will undertake postgraduate training. The details of the two programs are given in the appropriate study patterns.

Programs and Units

Approved programs of undergraduate study (Majors and coherent studies) are listed in this handbook under Schedule of Undergraduate Units and brief descriptions are given in the section entitled Descriptions of Undergraduate Units. The Schedule of Undergraduate Units provides details of the prerequisites for higher level units and the dates of fieldwork components and On Campus Sessions (external attendance dates) for this year.

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DEPARTMENT OF HEALTH AND CHIROPRACTIC

The Department of Health and Chiropractic offers two undergraduate degree programs.

Bachelor of Chiropractic Science Bachelor of Health

Chiropractic is an important part of complementary medicine, which recognises the importance of body structures and how they affect health. Largely, practitioners engage in spinal adjustment and manipulation as well as other measures to treat abnormalities of structure and function, and to assist the natural recuperative powers of the body. The Bachelor of Chiropractic Science provides a firm scientific grounding in anatomy, histology, pathology, microbiology and medical imaging as well as in a wide range of chiropractic skills and procedures. The Bachelor of Health is designed to provide students with an interdisciplinary and multi-disciplinary view of health and to develop their understanding of the social, economic, political and environmental determinants and consequences of health in developed and developing societies. The program has coherent studies in the areas of Community Health and International Health and offers students the opportunity of a brief health placement in a health-related industry.

Bachelor of Chiropractic Science

The Bachelor of Chiropractic Science program is a three-year fully prescribed degree which provides a solid base in scientific methods and concepts required for the study and practice of chiropractic. It includes anatomy, histology, biochemistry, physiology, microbiology, pathology, radiology and chiropractic principles and skills. The chiropractic principles and skills units introduce and develop the key concepts of chiropractic philosophy and techniques. Successful completion of the Bachelor of Chiropractic Science qualifies students for admission to the Master of Chiropractic. For students who wish to practice as a Chiropractor, completion of the Master of Chiropractic is required.

Please note: Completion of the Bachelor of Chiropractic Science alone does not allow to a student to practice as a chiropractor.

Majors and coherent studies

The following programs satisfy the requirements for these degrees and are currently offered by this Department.

Area of Study	Study Pattern	Code
Chiropractic	Chiropractic	CHRP01

Entry requirements

There are no formal prerequisite subjects to the degree, however it is advisable for applicants to have passed HSC Chemistry and Physics. International students should refer to the Macquarie International website (www.international.mq.edu.au/) or phone 61 2 9850 7346 for entry requirements and application details. For alternative routes of admission (Mature age or Non-Award entry), please refer to the Student Enquiry Service (02 98506410).

Professional accreditation

The degrees offered in Chiropractic are fully accredited and internationally recognised. Professional accreditation with the NSW Chiropractic Registration Board requires the award of Master of Chiropractic. Completion of the Bachelor's program allows entrance into the Master of Chiropractic program. Note that entry into the Master of Chiropractic is also possible through alternate means. Please refer to the Department website for details at www.chiro.mq.edu.au

Bachelor of Health

Why do the poor die young? What links exist between immigration and health? Why is infectious disease making a comeback? What challenges does increasing globalisation pose for public health in the developed and developing world? Why is ill-health and disability increasing among the aged? What are the key legal and ethical issues confronting the health sector in the 21st century? How do the media handle health issues? What is health promotion and what role does it play in improving population health? What links exist between the biophysical environment and health, and between climate change and disease?

These are the kinds of questions that concern scholars of human health and are addressed by the Bachelor of Health degree at Macquarie University. Students may elect to enrol in one of two strands of the degree program: Community Health or International Health. While differing somewhat in focus, both strands are designed to provide students with an interdisciplinary and multi-disciplinary view of health and an integrated awareness of the determinants, distribution and consequences of health and ill-health in contemporary societies. A new double degree program (BA-Psychology BHealth or BSc-Psychology BHealth) will run for the first time in 2005 (see the entry under the "Department of Psychology").

The Community Health strand of the BHealth degree provides students with a critical appreciation of the variety of preventive and health care delivery strategies in modern societies, as well as an introduction to measurement, causality and association in health. The program is prescribed. In the three years of study, students must complete 13 core units drawn from a wide variety of disciplines. At the same time, students can elect to study additional units from a variety of health-related units offered around the University.

The International Health strand explores the social, political, cultural, economic and environmental determinants and outcomes of health, particularly in the developing world. The program is prescribed. In the three years of study, students must complete 12 core units drawn from a variety of disciplines. At the same time, students can elect to study additional units from law, anthropology, politics, human geography, demography, psychology, sociology and health studies.

Students with a proven record of academic achievement in either the Community or International Health strands

may undertake a fourth year of study to obtain a BHealth (Honours) degree.

Majors and coherent studies

The Bachelor of Health requires three years of full-time study (longer for part-time students). To qualify for the degree of Bachelor of Health a candidate must obtain an aggregate of at least 68 credit points. The following programs satisfy the requirements for this degree, and are currently offered by this Department:

Area of Study	Study Pattern	Code
Health	Community Health	HLTH01
	International Health	HLTH02

Postgraduate Study

The Department offers a Masters, Postgraduate Diploma and Postgraduate Certificate in Ageing and Health. Full details of these programs can be found in the *Handbook of Postgraduate Studies*.

Programs and units

Approved programs of undergraduate study (Majors and coherent studies) are listed in the section of this Handbook entitled "Schedule of Undergraduate Programs". The units of undergraduate study are listed in the "Schedule of Undergraduate Units", and brief descriptions are given in the section entitled "Descriptions of Undergraduate Units".

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 Website: www.chiro.mq.edu.au/

DEPARTMENT OF HUMAN GEOGRAPHY

Human Geography involves the study of places, peoples, cultures and landscapes, including interactions among all four and impacts requiring policy action. There is a particular focus on urban and social planning, resource management, environmental planning, population and health studies, Geographic Information Systems (GIS) and service provision. Within the BA and BSc degrees, there are four main strands: economic, social population and cultural, resource and environmental management, and GIS. Employment opportunities exist with many government departments involved in planning, housing, transport, economic and social statistics, Aboriginal affairs and tourism, as well as with local government, teaching and consultancy firms. Students aiming to complete a degree in human geography or environmental management should consider a wide range of social science, science and economics (including demography) units.

Interdisciplinary studies

Bachelor of Environmental Management

The Department of Human Geography contributes to the teaching of this program. Please refer to the Divisional entry under “Interdisciplinary Study” for more detailed information.

Bachelor of Social Science

The Bachelor of Social Science (BSocSc) degree offers a broad education in social science subjects, spanning such diverse discipline areas as human geography, sociology, anthropology, media and mass communications and indigenous studies, as well as related subject areas in biology, law and history. It emphasises both theoretical and applied aspects in each of these areas.

Full details of the BSocSc degree can be found under the heading “Degrees Offered” in the Division of Society, Culture, Media and Philosophy entry in the *Programs of Study* section of this Handbook.

Distance Education Program

All units offered by Human Geography are offered externally, using a combination of audio tapes, hard copy handout material and via the Internet. The combination of methods of outreach varies, with some units emphasising one medium more than another (such as the Internet for GIS and GEOS114), but all three are used. On-campus sessions are held for some units, as specified, but some are optional. In these circumstances, the dates shown do not include the time needed to travel to or from the venue, and students need to make due time allowance for travel. Information about the future offering of external units may be obtained from the Centre for Open Education.

Cross-crediting allows students access to external units offered by several other universities. Students normally have to arrange their enrolment in these units during November of the preceding year, so this option is not available to those in their first year. The external offerings in each discipline are listed under the Departmental entries in this Part of the Handbook or is obtainable from the Centre for Open Education.

Composite Study Mode

Some units are offered in a composite mode to provide both ‘internal’ and ‘external’ access to metropolitan part-time students. This is often the case with units which are shared between Human and Physical Geography. Composite mode indicates that some components of the unit may require on-campus attendance, and other components are available in distance mode. Students should consult the unit description and/or staff in charge of the unit for full details.

Programs

The Department of Human Geography offers units for the following Pass and Honours degrees:

Bachelor of Arts
 Bachelor of Environmental Management
 Bachelor of Social Science
 Bachelor of Science

Note also that the BSc and BA degrees can be combined with other qualifications such as the Diploma of Education (DipEd), Bachelor of Laws (LLB) and Bachelor of Business Administration (BBA).

Majors and coherent studies

The Bachelor Degree Rules require, among other things, at least 18 credit points at 300 level or above, including an approved combination such as the ones referred to below. Students are permitted to take all of the 18 credit points, and more, within their Division of registration. The coherent combinations referred to below are approved for either the BA or the BSc degree.

Area of Study	Coherent Studies	Code
Environmental Sciences	Environmental Management	ENV05
Geographic Information Science	Geographic Information Systems	GIS02, GIS04
Geography	Geography	HGE03
Human Geography	Human Geography	HGE02, HGE05, HGE07, HGE08
	Geography	HGE07, HGE08
	Population/Social/Cultural Geography	PPL08, PPL09
Resource and Environmental Management	Resource and Environmental Management	REM01, REM02
Social Sciences	Human Geography	HGE04
	Population Studies	PPL01

100 level

All students interested in Human Geography should take: GEOS111; GEOS114

Students interested in GIS should also include any 100 level COMP, ISYS or STAT unit.

Or any one of: STAT170; STAT171

200 level

GEOS215; GEOS219; GEOS262; GEOS264; GEOS265; GEOS280

300 level

GEOS311; GEOS319; GESO324; GEOS347; GEOS351; GEOS371; GEOS387; GEOS426

Resource and Environmental Management program

The Department of Human Geography contributes to the teaching of this program. Please refer to the Divisional entry under “Interdisciplinary Study” for more detailed information.

Geographic Information Science program

The Department of Human Geography contributes to the teaching of this program. Please refer to the Divisional entry under “Interdisciplinary Study” for more detailed information.

Economic Geography program

Core

GEOS310; GEOS311; GEOS324

Other possible units (optional)

GEOS310; GEOS319; GEOS371

With the wide choice of units available in this program, intending students are strongly advised to consult an academic adviser to ensure that prerequisites for any 300-level units are met.

Population/Social/Cultural program

At least 12 credit points from the following: GEOS311; GEOS319; GEOS324; GEOS330

Programs and units

Approved programs of undergraduate study (majors and coherent studies) are listed in the section of this Handbook entitled Schedule of Undergraduate Programs. The units of undergraduate study are listed in the Schedule of Undergraduate Units, and brief descriptions are given in the section entitled Descriptions of Undergraduate Units.

Honours program — Human Geography

The Department of Human Geography offers honours programs leading to several degrees depending on your background and first degree: BA (Hons), BSc (Hons), BSocSc (Hons) and BEnvMgt (Hons).

The honours program is a fourth undergraduate year which gives you a valuable additional research qualification that typically helps your employment prospects and opens the way for postgraduate research in the future. Entry into the program is based on your grade point average and a member of academic staff to supervise your area of interest. Before proceeding we strongly recommend you discuss the matter with the Human Geography Honours Convenor and potential supervisors. If your interest spans more than one Department, you can be co-supervised by staff from other Departments.

Graduate Diploma in Geographic Information Science

The Department of Human Geography contributes to the teaching of this program. Please refer to the Divisional entry under “Interdisciplinary Study” for more detailed information.

Bachelor of Science or Bachelor of Arts with Diploma of Education

Students who are taking the combined BA DipEd program or the combined BSc DipEd program and wish to satisfy the NSW Department of School Education requirements for promotion should carefully consult the *Teacher Education Program Student Guide* for units to be taken in social sciences other than geography.

Units specified as a compulsory sequence for geography teaching are: GEOS111; GEOS112; GEOS117; at least one 200-level physical geography unit from GEOS216 and GEOS266; and at least one 200-level human geography unit from GEOS215, GEOS219 and GEOS280. It is recommended that students majoring in human geography include at least two units in physical geography at 200 level and similarly students who intend to major in physical geography should include at least two units in human geography at 200 level. It is also recommended students include GEOS114 in their program. Descriptions of these Undergraduate Units are provided in the section entitled Descriptions of Undergraduate Units in this Handbook.

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DEPARTMENT OF PHYSICAL GEOGRAPHY

Physical Geography involves the study of landscapes, the atmosphere and the environment in the broadest sense. It includes studies in applied and theoretical aspects of geocology and atmospheric science. Employment opportunities exist with many government departments involved in meteorology, conservation, environmental and land management, national parks, agriculture and water resources, as well as with local government, the teaching service, consulting firms and a range of private companies. Students aiming to complete a degree in physical geography or environmental science, should consider a wide range of science units.

Interdisciplinary studies

Bachelor of Environmental Science

The Department of Physical Geography contributes to the teaching of this program. Please refer to the Divisional entry under “Interdisciplinary Study” for more detailed information.

Bachelor of Environmental Management

The Department of Physical Geography contributes to the teaching of this program. Please refer to the Divisional entry under “Interdisciplinary Study” for more detailed information.

Bachelor of Marine Science

The Department of Physical Geography contributes to the teaching of this program. Please refer to the Divisional entry under “Interdisciplinary Study” for more detailed information.

Distance Education Program

Physical Geography units offered externally are GEOS112, GEOS114, GEOS117, GEOS214, GEOS216, GEOS237, GEOS264, GEOS265, GEOS313, GEOS317 and GEOS328. Significant components of GEOS301 and GEOS325 can also be undertaken off-campus. In some units distance delivery is via the Internet and in these instances students will need Internet access.

On-campus sessions are usually held at Macquarie University, except where other localities are specified, commonly for the purposes of fieldwork. In these circumstances, the dates shown do not include the time needed to travel to or from the venue, and students need to make due time allowance for travel. Information about the future offering of both evening and external units may be obtained from the Centre for Open Education.

Cross-crediting allows students access to external units offered by several other universities. Students normally have to arrange their enrolment in these units during November of the preceding year. They are therefore not available to those in their first year. The external offerings in each discipline are listed under the Departmental entries in this Part of the Handbook. Further information is obtainable from the Centre For Open Education.

Composite Study Mode

Some units are offered in the composite mode to provide access for metropolitan part-time students. Composite mode indicates that some components of the unit may require on-campus attendance, and other components are available in distance mode. As already indicated, in some units distance delivery is via the Internet and students will need Internet access. Students should consult the unit description and/or staff in charge of the unit for full details.

Programs and units

The Department of Physical Geography offers units for the following pass and honours degrees:

Bachelor of Arts
 Bachelor of Environmental Management
 Bachelor of Environmental Science
 Bachelor of Marine Science
 Bachelor of Science

Note also that the BSc and BA degrees can be combined with other qualifications such as the Diploma of Education (DipEd) and the Bachelor of Laws (LLB).

Majors and coherent studies

The Bachelor Degree Rules require, among other things, at least 18 credit points at 300 level or above, including an approved combination such as the ones referred to below. Students are permitted to take all of the 18 credit points, and more, within their Division of registration. The coherent combinations referred to below are approved for either the BA or the BSc degree.

Area of Study	Coherent Studies	Code
Atmospheric Science	Atmospheric Science	ATM01
Environmental Sciences	Environmental Physical Geography	ENV04
	Environmental Management	ENV05
Geoecology	Geoecology	GEC01, GEC02
Geographic Information Science	Geographic Information Systems	GIS02, GIS04
Geography	Geography	HGE03
Marine Science/ Geoscience	Geoscience	MAR02
Physical Geography	Physical Geography	PHG01, PHG02
Resource & Environmental Management	Resource & Environmental Management	REM01, REM02

Professional accreditation

Discussions are currently taking place in regard to professional accreditation in some aspects of Physical Geography. Please see academic staff for further details.

Academic advice

100 level

All students interested in Physical Geography should take: GEOS117

In addition, students interested in Geoecology should take: GEOS112; GEOS114; GEOS115; BIOL114

Students interested in Atmospheric Science should take GEOS117 plus: GEOS112; GEOS114; BIOL114; COMP115; MATH130 or MATH135; STAT170 or STAT171

The remaining 100-level units could be made up from the following: GEOS111; BIOL115; CHEM123; PHYS159; COMP123 and/or ISYS114 and/or COMP115

200 level

The core units at 200 level servicing the specialist areas at 300 level are: GEOS214; GEOS216; GEOS237; GEOS264; GEOS265; GEOS266

Other 200-level units which may be added include (but are not restricted to): BIOL210; BIOL227; GEOS224; GEOS230; GEOS260; PHYS220

Students interested in Atmospheric Science should consider 200-level MATHS, PHYS, BIOL and COMP units.

300 level

The principal 300-level units in Physical Geography are:

Geocology

GEOS317; GEOS328; GEOS398; GEOS399

Atmospheric Science

GEOS301; GEOS313; GEOS325; GEOS328

Highly recommended related units for all Physical Geography coherencies are: GEOS371; GEOS426

Other related units for all Physical Geography coherencies include: GEOS310; GEOS307; GEOS377; GEOS385; BIOL313; BIOL347; BIOL368

Atmospheric Science coherencies often include MATH, PHYS and COMP units at 300 level.

Resource and Environmental Management program

The Department of Physical Geography contributes to the teaching of this program. Please refer to the Divisional entry under “Interdisciplinary Study” for more detailed information.

Geographic Information Science program

The Department of Physical Geography contributes to the teaching of this program. Please refer to the Divisional entry under “Interdisciplinary Study” for more detailed information.

Bachelor of Environmental Science

The Department of Physical Geography contributes to the teaching of this program. Please refer to the Divisional entry under “Interdisciplinary Study” for more detailed information.

Bachelor of Marine Science

The Department of Physical Geography contributes to the teaching of this program. Please refer to the Divisional entry under “Interdisciplinary Study” for more detailed information.

Programs and units

Approved programs of undergraduate study (Majors and coherent studies) are listed in the section of this Handbook entitled Schedule of Undergraduate Programs. The units of undergraduate study are listed in the Schedule of Undergraduate Units, and brief descriptions are given in the section entitled Descriptions of Undergraduate Units.

Honours program — Physical Geography

Honours students in Physical Geography are required to take a supervised research project (16cp) and 8cp of coursework. 4cp of the coursework component are gained via a research methods unit convened within the Department. In special cases, students may write an 8cp dissertation and complete 16cp of coursework. As project

design is crucial to each Honours program, consultation with potential supervisors is encouraged early in undergraduate degree programs, especially if the prospective thesis topic entails a significant fieldwork component.

Graduate Diploma in Atmospheric Science

For information on this program please see above the entry under Graduate Programs in the Division.

Graduate Diploma in Geographic Information Science

For information on this program please see above the entry under Graduate Programs in the Division.

Bachelor of Science or Bachelor of Arts with Diploma of Education

Students who are taking a combined BSc DipEd program in any science strand are advised to include in their program: GEOS112 The Planet Earth, GEOS115 Earth Dynamics, Materials and the Environment, GEOS117 Biophysical Environments, GEOS216 The Atmospheric Environment, GEOS224 Introduction to Field Geology, GEOS235 Palaeontology, GEOS260 Lithospheric Environments and GEOS266 Earth Surface Processes. These will equip students to handle the earth and environmental science component as set out in the junior syllabus.

Students who are taking the combined BA DipEd program or the combined BSc DipEd program and wish to satisfy the NSW Department of School Education requirements for promotion should carefully consult the *Teacher Education Program Student Guide* for units to be taken in social sciences other than geography.

Units specified as a compulsory sequence for geography teaching are: GEOS111; GEOS112; GEOS117; at least one 200-level physical geography unit from GEOS216 and GEOS266; and at least one 200-level human geography unit from GEOS215, GEOS219 and GEOS280. It is recommended that students majoring in human geography include at least two units in physical geography at 200 level and similarly students who intend to major in physical geography should include at least two units in human geography at 200 level. It is also highly desirable for students to include GEOS114 in their program.

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GRADUATE SCHOOL OF THE ENVIRONMENT

Environmental Studies

The Graduate School of the Environment, although mainly focused on postgraduate teaching and research, offers three undergraduate units of study. They are ENV200, GSE200 and GSE300, and provide a general introduction to environmental studies, environmental economics and environmental management. Details of undergraduate programs in environmental studies are provided at the beginning of the Division's entry.

Division of Humanities

The humanities are so called because they focus on multiple aspects of human concerns, including language, creativity, literature, history and. Studies in the humanities provide a sound and necessary base for all areas of endeavour.

Students may choose to specialise in one area, or to study across a number of areas, and many have combined studies in, for example, English, with studies in one of the sciences, or human geography, mathematics, computing, or sociology.

We encourage our first year students to sample a number of different subject areas, so that they may make an informed choice about where their interests and talents lie. Some students choose to specialise in one or two areas in subsequent years, for example combining history with politics, or English and ancient or modern history, or creative writing with an Asian or European language, and so on.

The interdisciplinary study areas encourage students to combine, for example, various European or Asian languages, with history or politics, a combination often useful to students planning a career in foreign affairs. Students hoping to work in journalism in any medium are encouraged to take subjects across a broad spectrum of subject areas so that they will learn research skills across a number of different disciplines. Interdisciplinary study in the area of medieval studies is also available. Further information can be obtained from the Department of English.

Studies in the humanities are best regarded as both fundamental to all other studies, and as providing opportunities for the exploration of human knowledge, human endeavour and creativity across human history, to help us understand the times and conditions we all live in today, and give us the flexibility to deal with the challenges of the future.

The Departments within the Division are:

- Ancient History
- Asian Languages
- English
- European Languages
- Modern History
- Contemporary Music Studies
- Politics and International Relations
- Public Law

Areas of Study

Programs in the following Areas of Study are offered by departments in this Division.

Area of Study	Award	Department
Ancient History	BA	Ancient
	BA (Hons)	History
	BA BTh	
	BA DipEd	
	CertLang	

Asian Languages	BA BA (Hons) BA DipEd DipLang CertLang GradDip	Asian Languages	<i>Units on, or including, aspects of Medieval Studies include:</i> AHST104; AHST233/333; AHST234/334; AHST235/335; ENGL265; ENGL267; ENGL288 ENGL367; HIST192; HIST390; ITL308.
Australian Studies	BA	English, Modern History, Politics	In addition, the Latin program of the Department of Ancient History can include medieval Latin to reflect students' interests. For details of the program contact the Department of Ancient History on (02) 9850 8833.
English	BA BA (Hons) BA DipEd	English	Further details of the units of study are in the Descriptions of Undergraduate Units in Part 3 of the Handbook. Information on medieval studies can be obtained from Dr Marea Mitchell on (02) 9850 8754.
European Languages	BA BA (Hons) DipLang BA DipEd CertLang	European Languages	
Modern History	BA BA (Hons) BSocSc BA DipEd	Modern History	
Music	BA BA (Hons) BA DipEd	Contemporary Music	
Politics	BA BA (Hons) BA DipEd BSocSc	Politics and International Relations	

Degrees Offered

The following awards are offered by this Division and its departments:

- Bachelor of Arts
- Bachelor of Arts (Hons)
- Bachelor of Arts Bachelor of Theology
- Bachelor of Arts Diploma in Education
- Bachelor of Ancient History (Hons)
- Bachelor of Social Science
- Diploma in Languages
- Certificate in Languages
- Graduate Diploma

Interdisciplinary studies Medieval Studies

Several units are offered in the area of medieval studies. For students who are interested in undertaking interdisciplinary work on the Western Middle Ages (c 400–1500 AD), and who can show evidence of capacity for it, consideration will be given to waiving prerequisites and corequisites for certain units, at the discretion of the Dean of Division concerned. It is essential that students wishing to avail themselves of this opportunity discuss the matter with the staff member responsible for the unit before applying for waiver of prerequisites and corequisites.

Transfer between courses

Any student wishing to change his or her degree to another degree must meet the requirements set out in Part 1 of this Handbook, and a Request to Transfer Degree Course form must be completed.

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DEPARTMENT OF ANCIENT HISTORY

Ancient History offers over 30 units for study at undergraduate level and covers the antecedents of western civilisation in ancient Egypt, Israel and the Graeco-Roman world. Greek history is studied from Homer to the Hellenistic cultures under the Roman empire (including Judaism and early Christianity) and Roman history from the Republic to the Late Empire and the Byzantine period beyond to the Silk Road. Egyptian history is taught from the Predynastic period up to that of the Ramesside period. Egypt's later Coptic history merges with the Greek and Roman streams.

Bachelor of Arts

The study program for the degree of Bachelor of Arts consists of three years full-time (or the equivalent part-time). Students may choose Ancient History units for their coherent study program or choose Ancient History units as elective options.

Majors and coherent studies

The following programs satisfy the requirements for this degree, and are currently offered by this Department.

Area of Study	Coherent Studies	Code
Ancient History	History	ANC01
	Ancient History	ANC02

Bachelor of Ancient History (Honours)

The study program for the Honours degree of Bachelor of Ancient History consists of four years full-time (or the equivalent part-time). Students will need to achieve a sufficiently high UAI to qualify for this program. Transfer into the program is possible at a later point of entry.

Majors and coherent studies

The following program satisfies the requirements for this degree, and is currently offered by this Department.

Area of Study	Coherent Studies	Code
Ancient History	BAncient Hist (Hons)	ANCH03

Diploma/Certificate in Ancient Languages

Students wishing to study ancient languages without necessarily completing a major are able to enrol in either of two undergraduate awards: Diploma in Ancient Languages, which is open to students eligible for admission to a degree program at Macquarie or another approved institution; and the Certificate in Ancient Languages for which no admission criteria are specified. Both awards are HECS-based. Transfer is possible from the Certificate to the Diploma, and from the Diploma to a Bachelor Degree. The languages offered are Ancient Greek, Latin, Egyptian Hieroglyphs, and Classical Hebrew.

Majors and coherent studies

The following programs satisfy the requirements for this degree, and are currently offered by this Department.

Area of Study	Coherent Studies	Code
Ancient Languages	Certificate	ANCH04
	Diploma	ANCH01

Bachelor of Arts and Bachelor of Theology

Macquarie University and the Australian College of Theology offer suitable candidates the opportunity of pursuing BA and BTh degrees at the same time through an integrated program of studies.

The combined BA/BTh degree is a five-year program. The advantages of this combined degree program include the ability to integrate issues common to several Arts and Theological disciplines, to provide a channel of interaction between the University and theological education, and to lay a broader academic foundation for the study of theological and pastoral issues. Upon the successful completion of this combined degree program the candidate will be awarded the Bachelor of Arts by Macquarie University and the Bachelor of Theology by the Australian College of Theology.

Students may combine any of the disciplines offered at Macquarie University with the theological study from the Australian College of Theology. An obvious complementary program would involve study in the Departments of

Ancient History and Australian College of Theology, but other areas are available.

Students who do not wish to complete the BTh may still count units from the Australian College of Theology toward their BA degree.

BSc BA

Full details are available under the entry for the Division of Environmental and Life Sciences in this Part of the Handbook.

Programs of Study

The Bachelor Degree Rules require, among other things, at least 18 credit points above 200 level, including an approved combination of units. Students are permitted to take all of the 18 credit points, and more, within their Division of registration.

The coherent studies which are currently offered are listed in the Schedule of Undergraduate Programs.

100 Level Units

The 100-level units cater for the interests of students in other fields (such as literature, philosophy, and the social sciences), as well as providing a foundation for future work in any field of history. The use of the ancient authors and other primary source material is especially stressed. Students may proceed to some 200 level Ancient History units from 6 credit points in history (ancient or modern).

200 and 300 Level Units

At 200 and 300 level, units are offered as set out below, some units may be taken at either 200 or 300 level:

*Ancient Languages**

AHST205; AHST206; AHST280/281; AHST380/381; AHST207; AHST208; AHST280/281; AHST380/381; AHST241; AHST242; AHST260; AHST360; AHST380

*Students may take the ancient languages as part of their BA Program, or they may choose to take out separately a Certificate or Diploma in Ancient Languages. Please refer to ANCH04 and ANCH01.

Egyptology

AHST261; AHST361; AHST362; AHST363; AHST364

Archaeology

AHST210; AHST310; AHST236/336; AHST380/381

Greek History and Society

AHST221/321; AHST222/322; AHST274/374

Roman History

AHST231/331; AHST232/332; AHST250/350

Late Antiquity

AHST233/333; AHST234/334; AHST235/335; AHST252/352

Israel and Early Christianity

AHST209/309; AHST240/340; AHST251/351

Special Interest

AHST270/370; AHST271/371; AHST272/372; AHST280; AHST281; AHST380; AHST381; AHST382; AHST383

Units offered externally (some online):

AHST101, AHST102, AHST103, AHST209/309, AHST222/322, AHST233/333, AHST234/334, AHST235/335, AHST250/350, AHST251/351, AHST252/352, AHST272/372, AHST280/380 (some topics only) and AHST383

Note that not all units are available in any one academic year. It is advisable to consult the Schedule of Undergraduate Units of Study. An information booklet on Ancient History is available from the Department.

Academic advice

Students preparing for 300-level units are strongly urged to consider the advantage of including in their program at 200 level at least one of the ancient language units AHST205, AHST206, AHST207, AHST208, AHST241, AHST260. Students planning to take AHST310 Archaeological Fieldwork, which requires prior or concurrent completion of certain units, should consult the Schedule of Undergraduate Units before undertaking 200-level units.

Students planning to submit a thesis in ancient history in the honours course should consider completing one of the ancient language units; this is a necessary preliminary to writing a higher-degree thesis in ancient history. (For further information on the honours program, please contact the Ancient History Office.)

Programs and Units

Approved programs of undergraduate study (majors and coherent studies) are listed in the section of this Handbook entitled “Schedule of Undergraduate Programs”. The units of undergraduate study are listed in the “Schedule of Undergraduate Units”, and brief descriptions are given in the section entitled “Descriptions of Undergraduate Units”.

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DEPARTMENT OF ASIAN LANGUAGES

The Department of Asian Languages offers degree programs in Chinese and Japanese. The aim is to develop proficiency in these languages and to provide an under-

standing of the society and culture of the countries where the languages are spoken. Modern language teaching methodology and technology are used, and there is a strong emphasis on communication skills. Overseas study is strongly encouraged and students can participate in residential units and traineeships. The University provides travel grants for overseas study on a competitive basis.

All of the programs offered contain core language units and a number of options. There are also non-language units on aspects of society and culture available to students of all disciplines.

Chinese**Bachelor of Arts***Majors and coherent studies*

The following programs satisfy the requirements for this degree, and are currently offered by this Department.

Area of Study	Coherent Studies	Code
Asian Languages	Chinese	LGA01

Bachelor of Arts with Honours

The honours year of a Bachelor of Arts with Honours in Chinese concentrates on research training and advanced language study. Students will be required to present a thesis of approximately 10,000 words (in English) on a subject covered in the language, literature and cultural units offered in the Department, within the range of specialisation of the staff. They will do a substantial research project related to the thesis topic (about 25 pages of Chinese text) and present a seminar on their research. Research guidance with a supervisor will be on the basis of one hour per week during the academic year.

Certificate/Diploma in Languages*Majors and coherent studies*

The following programs satisfy the requirements for Certificate or Diploma in Languages, and are currently offered by this Department.

Area of Study	Coherent Study	Code
Asian Languages	Diploma (Chinese)	CHNS02
	Certificate (Chinese)	CHNS01

Academic advice

Many Chinese units require the Permission of Dean of Division. This means that your enrolment will have to be approved by a member of the Chinese staff, who will be available during the enrolment period for this purpose.

In first year beginners should enrol in CHN104 Introductory Chinese I and CHN148 Basic Spoken Chinese I in the first semester. CHN104 concentrates on the written language, and CHN148 on spoken Mandarin. In your second semester you should enrol in CHN105 Introductory Chinese II and CHN149 Basic Spoken Chinese II. These courses are for people who know no

Chinese at all, or very little. Such students are also welcome to enrol in CHN123 Chinese Civilisation (in English), CHN112 Chinese Calligraphy, and CHN110 Chinese III during the summer break.

If you can read and write Chinese but have not passed HSC Chinese (background speakers) or the equivalent, you should enrol in CHN115 and CHN116.

Students who pass Introductory Chinese in their first year may enrol in Intermediate Chinese in their second year and Advanced Chinese in their third year. These units are for students whose first language is not Chinese, and who have started their study of Chinese at university level. Other students will not be permitted to enrol in these units, but are welcome to enrol in any of the other units as specified in the unit descriptions.

Students who already know Chinese quite well should enrol in CHN156 Introduction to Chinese Culture in their first semester. This course is entirely in Chinese, and all lectures will be in Mandarin. If they wish, they may also enrol in CHN123 Chinese Civilisation; all lectures, textbooks, assignments and examinations for this unit are in English. Another popular unit at 100 level is CHN112 Chinese Calligraphy, which is suitable both for students who know little Chinese and for those who are quite literate in Chinese.

Students who have passed HSC Chinese (Background Speakers) may directly enrol in CHN208 Intermediate Chinese for Background Speakers I and CHN209 Intermediate Chinese for Background Speakers II; these are also the appropriate courses for students who have completed CHN115 and CHN116.

Japanese

The Japanese Studies program places emphasis on the acquisition of practical communication skills and many of the units are designed to achieve a higher level of language skills. A variety of units in literature, culture, history and media studies are also offered to be studied together with language units.

Bachelor of Arts

Majors and coherent studies

The following programs satisfy the requirements for this degree, and are currently offered by this Department.

Area of Study	Coherent Study	Code
Asian Languages	Japanese A	LGA02
	Japanese B/C	LGA03

Bachelor of Arts with Honours

Students who intend to proceed to an honours degree in Japanese will normally be expected to have completed the three-year course with a major in Japanese Studies.

The honours course consists of a thesis; language; seminar on civilisation; one component selected from literature, interdisciplinary studies, and current issues through media.

The subject of the thesis will be determined according to the particular interest of the student after consultation with Japanese staff.

Certificate/Diploma in Languages Graduate Diploma

To qualify for the Graduate Diploma in Japanese, a candidate must obtain an aggregate of at least 24 credit points in Japanese units with the code JPN including not less than 12 credit points at 300 level or above and such units as have been prescribed by the Academic Senate on the recommendation of the designated Dean of Division.

Graduate Certificate in Introductory Japanese Teaching

To qualify for the Graduate Certificate in Introductory Japanese Teaching (GradDipIntroJpnTeaching) a candidate must obtain an aggregate of at least 12 credit points comprising such units as have been prescribed by the Academic Senate on the recommendation of the designated Dean of Division.

These units must be completed: JPN110, JPN111, JPN112, JPN195.

Graduate Certificate in Japanese Corporate Training

To qualify for the Graduate Certificate in Japanese Corporate Training (GradDipJpnCorpTraining) a candidate must obtain an aggregate of at least 12 credit points comprising such units as have been prescribed by the Academic Senate on the recommendation of the designated Dean of Division.

These units must be completed: JPN403, JPN404, JPN405, JPN406

Interdisciplinary studies

With the establishment of the Centre for Japanese Economic Studies, it is now also possible for students to combine the study of Japanese language and culture with the study of Japanese business and economics. Students who are interested in such a program, or in the Bachelor of Business Administration with Japanese Studies degree, should seek academic advice from the Division of Economic and Financial Studies and check prerequisites with the staff of the Department of Japanese Studies. JPN350 Japanese Economic Documents forms part of the requirements for a coherent major in a BEc or BCom in Japanese Economy and Language.

The training of Japanese language teachers is one of the objectives of the Department of Japanese Studies. A specialist Centre, the Japanese Studies Centre for Teaching Development, was established to build on the teaching strengths of the Department and to develop new initiatives in this field. JPN340 Approaches to Japanese Teaching is for both teachers and prospective teachers of Japanese language.

Distance Education Program

The units JPN110X, JPN111X, JPN112X are offered in distance mode.

Academic Advice

Students who have not studied the Japanese language before and students with minimum experience in formal studies of Japanese will start their Japanese studies with two half-year units, JPN110 and JPN112. Both units are offered in the first half-year and form prerequisites for the rest of the Japanese program. After successful completion of JPN110 and JPN112, students can proceed to JPN111, which is a continuation of JPN110 in the second half-year. JPN110, JPN111 and JPN112 are also offered in flexible mode via the internet. In addition, JPN113, which aims to introduce students to basic skills in spoken Japanese, is offered in the second half-year as an optional unit.

Introductory level students who have completed some formal Japanese Studies, including HSC Beginner and HSC continuers Japanese, start their Japanese Studies program with JPN153 in the first half-year. In the second half year students proceed to JPN154 which is a continuation of the JPN153.

JPN111 and JPN154 are followed by JPN190, which is a reading unit during the long vacation. JPN190 is strongly recommended for students who intend to proceed to 200-level Japanese. In addition to language units, JPN122 A Survey of Japanese Culture is offered in the first half-year and JPN123 Japan's Contemporary Culture through Manga is offered in the second half-year. These units aim to introduce students to Japanese society and culture. JPN195 Japanese In-country Program is for language and cultural study in Japan. It has two streams: Stream A is undertaken during the mid-year break, by the students who completed JPN111; and Stream B, in the summer vacation, is only for eligible students of the Graduate Certificate of Introductory Japanese Teaching Course.

Students who have completed HSC 3-unit Japanese or HSC Extension Japanese will begin with the language unit JPN221 in the first half-year and continue with JPN222 in the second half-year. They may also enrol in the various 200-level optional Japanese units.

Department of Asian Languages enquiries

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DEPARTMENT OF ENGLISH

The Department of English offers a broad range of units, including most periods of English, Australian writing and post-colonial literature, drama, literary theory, and creative writing. Students from all Departments of the

University are welcome to take some English units as elective units in their program of study. English units may be taken as part of many degrees, such as the BA, BMedia or BCA.

Students who plan to major in English generally complement their studies in English with other units from the Humanities Division, or with units in creative writing or performance drama from the Division of Society, Culture, Media and Philosophy, but students with broad interests can combine their studies in English with units from areas as diverse as philosophy, ecology or human geography.

[Please note that "English for Academic Purposes", which is for students whose first language is not English, is taught by the Department of Linguistics not by the Department of English.]

The Department contributes in various ways to the University's program in Creative Arts (for information on the Creative Arts Program, see the entry for the Division of Society, Culture, Media and Philosophy in this Part of the Handbook). Students with interests in this area may combine ENGL units with units from other Departments, such as Cultural Studies, which offers two practical drama units. Study of drama texts can also be undertaken in many ENGL units, especially those on Modern Drama and Shakespeare and the Renaissance. Creative Writing may be studied at both 200 and 300 level.

Interdisciplinary studies Australian Studies

The University offers a multi-disciplinary program in Australian Studies which enables students to take major studies in such areas as Australian history, literature, environmental history, gender relations and politics.

The required units are AUST100 Australian Perspectives I: Maps, Dreams, History, AUST200 Australian Perspectives and AUST300 Australian Perspectives II. The units are intended to form a central sequence which integrates a program of study for the Bachelor of Arts degree, drawn from several Departments of the University.

Students interested in studying in this area should refer to units offered by the various Departments, included in information under Programs of Study in this Part of the Handbook. Coherent study AUS01 is recommended, while combinations of some of the following units would provide students who do not wish to take the full program with a strong background in Australian studies.

The following units contain a substantial or wholly Australian component:

AUST200; ENGL263; ENGL270; ENGL286; ENGL323; ENGL361; ENGL386

Distance Education Program

The University offers distance education programs leading to the degrees of BA, BEd (ECE), BSc and LLB. Distance education teaching involves the use of study

guides and reading programs, audio tapes and the regular submission of written assignments. An increasing number of units also include online teaching.

Distance Education Studies

Applications will be considered for enrolment in the distance education programs from academically qualified persons. Applicants aged 21 years or more who apply through the Direct Entry Distance Education Scheme will be considered according to special selection criteria.

Distance Education Bachelor of Arts

There are a number of areas in which students may complete a coherent study wholly by distance education, including ancient and modern history, English, education, politics, biology, human geography, earth and planetary sciences and some European languages. Information about the units offered by distance education is available from the Centre for Open Education.

Additional flexibility is available to students living in the metropolitan area who may include units with internal day or evening attendance in their program if they wish.

Units Offered in Distance Mode

ENGL120; ENGL218; ENGL263; ENGL264;
ENGL270; ENGL271; ENGL325; ENGL361;
ENGL386; ENGL106; ENGL267; ENGL286;
ENGL317; ENGL319; ENGL323; ENGL367

Bachelor of Arts with Honours

The requirements for the English honours program are a minimum of 24 credit points in English and Cultural Studies units above 100 level, including at least 12 points at 300 level, and at least 8 in 300-level ENGL units. All candidates will take ENGL431 Literary Theory; two other 400-level ENGL units; ENGL461 Short Thesis (12,000-15,000 words) on a topic in English; and a research skills and thesis workshop

Please contact the Department of English for unit availability in 2005.

The Department of English has a strong research profile. Details of research programs are given in the *Handbook of Postgraduate Studies*.

Bachelor of Creative Arts

The Bachelor of Creative Arts is a multidisciplinary degree designed for those seeking employment in the arts and associated organisations or public services, especially those planning a career involving arts administration. See Creative Arts Program under the entry for the Division of Society, Culture, Media and Philosophy in this Part of the Handbook.

Programs and Units

Approved programs of undergraduate study (majors and coherent studies) are listed in the section of this Handbook entitled Schedule of Undergraduate Programs. The units of undergraduate study are listed in the

Schedule of Undergraduate Units, and brief descriptions are given in the section entitled Descriptions of Undergraduate Units.

Academic Advice

Generally speaking, all students who intend to take the Department's 200 or 300 level units should enrol in the foundation unit ENGL120, Introduction to English. If you intend to major in English, you are advised to take both 100 level units, although only ENGL120 is compulsory. Students planning to major in English Language and Literature should combine these two units with LING109 and LING110. Students wishing to major in drama should take ENGL120 with either CUL100 or ECHL111; ENGL106 is optional. Students who wish to major in Creative Writing should take ENGL120 and CUL100; ENGL106 is optional. If you intend to be a primary teacher or secondary teacher of English, please consult Macquarie's Department of Education, which provides extensive information in its booklet on the units you should study in order to meet the requirements of the NSW Department of School Education.

Normally students majoring in English in a full-time program would take at least 8 credit points from ENGL211–ENGL299 in their second year and at least 12 credit points from ENGL300–ENGL388 in their third year.

Department of English enquiries

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DEPARTMENT OF EUROPEAN LANGUAGES

The Department of European Languages offers full programs, including majors, in the following languages: Croatian, French, German, Italian, Macedonian, Modern Greek, Polish, Russian and Ukrainian.

The aim is to develop proficiency in these languages and to provide an understanding of the society and culture of the countries where they are spoken. Up-to-the-minute language teaching methodology and technology are used, and there is a strong emphasis on communication skills.

Programs in Croatian, Macedonian, Modern Greek, Polish and Ukrainian are financially supported by their respective Studies Foundations.

Level of Entry

Beginners' units are available in all of the European languages offered at Macquarie. These do not require any prior knowledge of the language and can be taken by any student of the University. A full Study Pattern leading to a Major is available to students in both the beginners' stream and the Post-HSC stream.

Cross-Institutional Studies

Students from other universities can apply to take Macquarie units in European Languages on a cross-institutional basis.

Interdisciplinary studies

The Department offers a number of interdisciplinary units that may be of interest to all language students. EUL100 Grammatical Concepts in Language Learning is recommended to students with little general grammatical knowledge. EUL101 is an introduction to the various societies that make up a colourful Europe working towards unification. EUL300 Postwar European Novel and EUL303 European Short Stories are particularly relevant for students of European literature and can also be taken by students of English. EUL392 Introduction to Computer-Assisted Language Learning is designed for all students with an interest in languages. There are also units on Slavonic literature and culture: SLS224 Topics in Slavonic Literature and SLS300 Slavonic Literature in Translation. For further information on interdisciplinary units, see the descriptions of units.

Reading Units

Reading units for special purposes are offered in French and German (FRN295, GMN295/296). They are designed for students who wish to acquire a reading knowledge of the language for interest or research purposes. No knowledge of the language is required as a prerequisite, thus the units are also open to students from other Departments.

Distance Education Program

Most units can be taken by distance education (often with on-line components). All units in Croatian, Macedonian, Polish and Ukrainian are offered in this mode. Many units in French, German, Italian, Modern Greek and Russian are also offered by distance education as well as on-campus.

Overseas Studies

Overseas studies are strongly encouraged by the Department and a comprehensive program has been introduced which offers students of European languages the possibility of studying at a tertiary institution in Europe. Their overseas studies will be credited towards their Macquarie degree, diploma or certificate. University degree regulations require students studying overseas to complete at least 9 of the minimum of 18 credit points needed at 300-level at Macquarie. Students should discuss their overseas program in advance with an academic adviser to ensure that they fulfil all University requirements.

Residential Short Units

These units are offered at introductory, intermediate and advanced levels in French, German, Italian, Modern Greek, Russian and at introductory and intermediate levels in Croatian. Students attend a short intensive language

course at a European university during the mid-year break or the long vacation.

In-Country Study Units

Two semester-long units are offered, EUL301 In-Country Study Unit I and EUL302 In Country-Study Unit II. Students enrolled in any of the European languages can take these units. Students undertake an approved program of study at a European university, usually one with which Macquarie has an exchange agreement. For more information see the unit descriptions.

In support of its policy of internationalising undergraduate study the University offers travel grants for students undertaking overseas study as part of their award. In some languages other travel scholarships are also available. For further information contact the Department of European Languages.

Bachelor of Arts

Students who do not wish to proceed to a major in a European language may take any individual unit for which they satisfy the prerequisite. Students wishing to major in a European language should follow one of the two Study Patterns offered in each language: Beginners (for students with no or limited knowledge of the language) or Post-HSC/Intermediate (for students with HSC extension or continuers bands 4-6 or equivalent).

Majors and coherent studies

The Bachelor Degree Rules require at least 18 credit points above 200-level, including an approved coherent combination of units such as the ones listed below. Students can, if they wish, take all of the 18 credit points, and more, within the Department of European Languages. The various study patterns leading to Majors are set out in the Schedule of Undergraduate Programs. Please refer to the Schedule under Area of Study: European Languages when selecting a program. A code number has been assigned to each Study Pattern.

The following programs satisfy the requirements for this degree, and are currently offered by this Department.

Major	Study Patterns	Code
Croatian	Beginners	CRTN01
Croatian	Post-HSC	CRTN02
French	Beginners	FRNC01
French	Post-HSC	FRNC02
German	Beginners	GRMN01
German	Post-HSC	GRMN02
Italian	Beginners	ITLN01
Italian	Post-HSC	ITLN02
Macedonian	Beginners	MCDN01
Macedonian	Post-HSC	MCDN02
Modern Greek	Beginners	MDGK01
Modern Greek	Post-HSC	MDGK02
Polish	Beginners	PLSH01
Polish	Post-HSC	PLSH02
Russian	Beginners	RUSN01
Russian	Post-HSC	RUSN02
Ukrainian	Beginners	UKRN01
Ukrainian	Post-HSC	UKRN02

Academic Advice

Students unsure of their entry level should contact the Department for advice.

Certificate/Diploma in Languages

A Certificate in Languages (CertLang) and a Diploma in Languages (DipLang) are offered in all European languages, starting at introductory, or at intermediate level. Both are HECS-based awards and can be completed together with a degree, or as stand-alone programs. Transfer is possible between Certificate and Diploma, and between Diploma and Degree programs. For relevant study patterns refer to the Area of Study “European Languages” in the Schedule of Undergraduate Programs. Interested students should contact the Department of European Languages for further information, tel (02) 9850.7005, fax (02) 9850.6057.

Honours and Postgraduate Programs

An Honours program is available in Croatian, French, German, Modern Greek, Russian and Ukrainian. Students interested in taking Honours should consult staff in their particular language for information about prerequisites and study programs.

Postgraduate research programs are offered in most languages and intending students should seek the advice of staff in their area.

Programs and Units

Approved programs of undergraduate study (majors and coherent studies) are listed in the section of this Handbook entitled Schedule of Undergraduate Programs. The units of undergraduate study are listed in the Schedule of Undergraduate Units, and brief descriptions are given in the section entitled Descriptions of Undergraduate Units.

Department of European Languages enquiries

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DEPARTMENT OF MODERN HISTORY

Modern History is an enquiry into past human experience. It is an enquiry in which we seek to learn not only what happened, but to consider motives, causes, patterns and consequences. As an enquiry, historical study involves distinct skills in examining evidence, in reading, in evaluating evidence, and in argument.

Possible careers include public servant, diplomat, administrator, writer, research assistant and with further studies teaching, museum curator, librarian, archivist, records management, in both private and public sectors free-

lance historical assignments, editorial work, journalism, travel and tourism, heritage and cultural agencies.

Interdisciplinary studies

Australian Studies

The University offers a multi-disciplinary program in Australian Studies which enables students to take major studies in such areas as Australian history, literature, environmental history, gender relations and politics.

The required units are AUST200 Australian Perspectives and AUST300 Australian Perspectives II. The units are intended to form a central sequence which integrates a program of study, for the Bachelor of Arts degree, drawn from several Departments of the University.

Students interested in studying in this area should refer to units offered by the various Departments, included in information under Programs of Study in this Part of the Handbook. While there are no specific patterns recommended, combinations of some of the following units would provide students who do not wish to take the full program with a strong background in Australian studies. This Department offers the following units which can form of this program.

HIST109; HIST216; HIST217; HIST245; HIST316; HIST340; HIST349

Students seeking further advice should consult the Deans of Divisions offering the units or e-mail: austuds@mq.edu.au

Majors and coherent studies

The following programs satisfy the requirements for the BA and BSocSc degrees, and are currently offered by this Department.

Area of Study	Coherent Studies	Code
Modern History	Modern History	MDH01
	Modern History	MDH03

Programs and Units

Approved programs of undergraduate study (majors and coherent studies) are listed in the section of this Handbook entitled “Schedule of Undergraduate Programs”. The units of undergraduate study are listed in the “Schedule of Undergraduate Units”, and brief descriptions are given in the section entitled “Descriptions of Undergraduate Units”.

BSc BA

Full details are available under the entry for the Division of Environmental and Life Sciences in this Part of the Handbook.

Modern History Honours Program Bachelor of Arts with Honours in History

Students with the appropriate qualifications (normally a major in history at an average of not less than “B” or “Credit”) are invited to join the History Honours pro-

gram. The program may be completed in one year (full-time) or over two years (part-time). Students may enrol either at the beginning or mid-way through the calendar year. Applications should be made via the University's Student Centre before October 31 or May 31, depending on the starting date.

History Honours is intended to help equip students for a variety of careers and qualify them as creative persons developing capacity for independent and critical thought. History Honours, is, in the second place, an initiation into the profession and a preliminary to postgraduate work. The Honours course consists of two units in history and theory; two seminar units; and a thesis of 15,000–20,000 words.

For further information about the program please contact Dr Marnie Hughes-Warrington, History Honours Convenor, fax: (02) 9850 6594; tel: (02) 9850 8806; email: mhughesw@hmn.mq.edu.au or visit the website <http://www.modhist.mq.edu.au/hsthons.html>

For a current History Honours Information Booklet contact the Modern History Office, fax: (02) 9850 6594; tel: (02) 9850 8879.

Department of Modern History enquiries

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Website: www.modhist.mq.edu.au

DEPARTMENT OF CONTEMPORARY MUSIC STUDIES

The Department of Contemporary Music Studies is dedicated to the study of various forms of 20th and 21st century music (popular, folk/indigenous, electronic, avant garde etc). It offers a major within the University's generic Bachelor of Arts (BA) degree, a BA Honours program and research degrees at Masters and PhD level. The DCMS is actively engaged in research, publication and recording projects and is Australia's leading centre of activity in these fields. It publishes *Perfect Beat – The Pacific Journal of Research into Contemporary Research and Popular Culture* and runs *Coral Music* – a label dedicated to recording artists from Western Pacific communities.

The units of study in Contemporary Music Studies provide a broadly-based introduction to contemporary music in the form of twentieth-century fine, popular and world music with particular attention to music produced with the Pacific rim. Production units at 200 level and 300 level involve use of a Mackintosh computer laboratory (along with samplers, sequencers, etc.) to compose and produce original music and, in MUS 302, music and multimedia work. A series of units in singing and guitar performance are also offered at 200 level and 300 level.

Note: Students are not required to have previous instrumental skills and/or experience in the study of music prior to commencing Contemporary Music Studies at Macquarie. The units provide full introductions to the skills and analytical frameworks necessary to complete the course.

Bachelor of Creative Arts

The Bachelor of Creative Arts (BCA or BCA International) is a multidisciplinary Degree designed for those seeking employment in the arts and associated organisations or public services, especially those who plan a career involving arts administration.

The program adopts a wide definition of the arts and addresses the needs of workers including theatre, film, publishing, galleries, museums, funding organisations regional arts centres and educational institutions. Students complete a major study in arts, contextual arts or performing arts.

Majors and coherent studies

The following programs satisfy the requirements for this degree, and are currently offered by this Department.

Area of Study	Coherent Studies	Code
Creative Arts	Music	CRE01
	Music	CRE05

Please refer to the Schedule of Undergraduate Programs.

Honours in Contemporary Music Studies

A Bachelor of Arts Hons is available in a one year full-time mode (MUS 490) or a two year part-time mode (MUS 495).

A minimum GPA of 2.5 at third year plus a coherent study in Music (or Media with at least two 300 level Music units) is required.

Students will take MUS 440 Music, Culture and Context; MUS 441 Research Induction; MUS 444 Thesis/project and either MUS 442 Music Analysis or MUS 443 Music Production.

Academic Advice

For further information please contact the Department or see our advisors on enrolment day.

Department of Contemporary Music Studies enquiries

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Website: www.dcms.mq.edu.au

DEPARTMENT OF POLITICS AND INTERNATIONAL RELATIONS

Politics is a valuable preparation for many careers. Foreign service trainees and administrative trainees in the public service have usually included some study of politics in their degrees. A politics degree also aids entry to more directly political occupations such as parliamentary staff. In the private sector, many Macquarie politics graduates are employed in non-government organisations including foreign aid agencies, trade unions, business lobbies, in the rapidly growing field of public affairs management and as journalists. Politics is also an appropriate area for teachers, particularly with the introduction of new Civics and Asian Studies streams in primary and secondary school curricula. Politics combines well with broader humanities and social science programs, such as history, philosophy, sociology, or mass communications. It is a useful addition to an economics degree and has close affinities with the study of law. For more information, see <http://www.pol.mq.edu.au/>.

Bachelor of Arts

Politics at Macquarie consists of four main sub-fields: Australian politics and foreign policy; international relations; political theory; and area studies focusing on particular world regions.

For units available in 2005 see the Schedule of Undergraduate Units.

Australian Politics and Foreign Policy

At first-year and second-year levels the units concentrate on familiarising students with institutional structures and recent political history, on introducing basic concepts and analytical approaches to the study of politics, and on exploring the relationship between certain practices and aspects of political theory. In some third-year units students are introduced to general theories and approaches to policy analysis.

POL165; POL168; POL250; POL300; POL341; POL374; POL386

International Relations

Units in this field look at Australia and its region, United States foreign policy and the international relations of the Third World. Later units develop the advanced study of particular aspects of policy formation.

POL168; POL270; POL321; POL380; POL386

Political Theory

The objective of this strand is to introduce students to major debates in the field and different ways of political thinking. All students pursuing a coherent course of study in Politics are strongly encouraged to enrol in at least one political theory unit at second-year or third-year level. Students are introduced to the ideas of influential political theorists and to debates about democracy, liberalism, justice, feminism and civil society.

POL167; POL264; POL342

Area Studies

This strand concentrates on the way in which internal and external factors shape political developments in countries other than Australia. The main areas covered are the United States, the Middle East, Latin America, China, South Asia and Europe.

POL251; POL259; POL260; POL266; POL282; POL321; POL383

Majors and coherent studies

The following programs satisfy the requirements for this degree, and are currently offered by this Department.

Area of Study	Coherent Studies	Code
Politics	Politics	PLT01
	History & Politics	PLT02
Social Science	Politics	PLT03

Programs and Units

Approved programs of undergraduate study (majors and coherent studies) are listed in the section of this Handbook entitled “Schedule of Undergraduate Programs”. The units of undergraduate study are listed in the “Schedule of Undergraduate Units”, and brief descriptions are given in the section entitled “Descriptions of Undergraduate Units”.

Bachelor of Arts with Honours

Students who wish to enter the Honours program course must complete at least a major sequence in politics (12 credit points at 300 level), with a Grade Point Average of 3.0 (Credit) or better at 300 level, and a GPA in Humanities and/or Social Science units at 300 level of 3.0 or better; POL368 Reading Unit in Politics should be included. It is recommended that intending honours students in politics should have some acquaintance with other social sciences and the humanities. In terms of credit points, a well-balanced preparation might be 24 credit points in politics and 12 each in history or philosophy and the behavioural or earth sciences. It is desirable for students to combine a coherent study in politics with a major coherent study in economics, media study, history, sociology, philosophy, anthropology, urban studies, or a foreign language.

The honours program is offered on a part-time (two year) basis, as well as on a full-time (one year) basis, specifically to accommodate people whose work or other commitments do not allow them to study full time. The course commences in the first half-year, but students may also enrol in the second half.

The honours course program consists of two seminar units (in the first half of the year), a 15,000 word thesis and a thesis writing seminar. Students must have a thesis topic approved by their prospective supervisor before their applications will be accepted. For students who enrol at the beginning of the year, work on the thesis should begin over the summer break and be well advanced by April.

Bachelor of Social Science

The Bachelor of Social Science can be completed with coherent study in Politics and International Relations. See under Bachelor of Social Science in the entry for the Division of Society, Culture, Media and Philosophy in this Part of the Handbook, visit the website at <http://www.mq.edu.au/bsocsc/main.htm>, or email: socsc@mq.edu.au.

Department of Politics and International Relations enquiries

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DEPARTMENT OF PUBLIC LAW

Law as a subject is of interest to all citizens. The location of the Department of Public Law in the Division of Humanities enables students from all disciplines to enrol in historical, comparative and theoretical units on common law and constitutional, corporate and communications law (LEGL100, LEGL201, LEGL202 and LEGL203).

Students from any discipline interested in gaining insights into constitutional and administrative law issues should also consider LAW311/312 Public Law I/II. These units are offered as part of the LLB program, but any student who has completed 40 credit points or received permission from the Dean of Division of Humanities may enrol.

The Department also offers a number of units (LAW304, LAW311/312, LAW404, LAW406, LAW407, LAW412, LAW417, LAW421, LAW434, LAW435, LAW436, LAW511, LAW514, LAW515, LAW516) that can be taken as part of the LLB program.

Majors and coherent studies

The Department offers its units to non-LLB students as electives.

Department of Public Law enquiries

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 Website: www.publiclaw.mq.edu.au

Division of Information and Communication Sciences

The Division of Information and Communication Sciences brings together the Departments of Computing, Electronics, Mathematics and Physics at Macquarie University. Teaching is underpinned by a strong research culture, effective collaboration with industry and a commitment to community outreach. Teaching within the Division focuses on both the fundamentals and professional requirements of individual disciplines. Students gain a valuable range of generic skills including problem solving, research and synthesis of information, quantitative analysis, and written and oral communications skills, presented in context within the normal study patterns. Graduates from this Division have strong employment prospects due to the continuing need for highly skilled and flexible professionals to work in the information, telecommunications, mathematical and physical sciences.

Units of study in this Division can be combined with those in other Divisions to provide worthwhile interdisciplinary programs of study such as bioinformatics, biophysics, climatology, computational linguistics, econometrics, environmental science, geophysics, operations research, statistics or vertebrate physiology. Students registered in this Division and wishing to pursue such a program should discuss their proposed program of study with an academic adviser at the earliest opportunity. There are also available double-degree programs, where a degree offered by the Division is combined with a second degree, particularly in Economic and Financial Studies or Law.

Part-time evening students should note that most units of study in computing and mathematics and some units in physics are planned to be offered regularly on an evening or late-afternoon basis (or composite mode for physics), at least (for computing and mathematics) to the extent necessary to complete a combination of 300-level coherent studies and all the corresponding prerequisites. Details of these offerings are given in the Schedule of Undergraduate Units.

The Division excels in all research indicators including publications, internal and external competitive research grants, research contracts, Australian Research Council (ARC) Fellowships, distinguished visitors and postgraduate student numbers.

The Division's research is built on the strengths of its four Departments (Computing, Electronics, Mathematics and Physics) and its Research Centres (the Centre for Lasers and Applications, the Centre of Australian Category Theory, the Centre for Quantum Computing Technology and the Centre for Ultrahighbandwidth Devices for Optical Systems). Strong links exist between researchers in the different Departments and Research Centres of the Division as well as with researchers at

prominent national and international research institutes and universities.

The Division sustains research activities with the highest international standing as well as maintaining a broad range of research activities of excellent national and international standing. The Division acknowledges that research activity is important to maintaining high-standard undergraduate, honours and postgraduate programs; the Division therefore encourages and supports research activities that enhance its educational mission.

Areas of Study

Programs in the following Areas of Study are offered by departments in this Division and in the Postgraduate Professional Development Program.

Area of Study	Award	Department
Astronomy and Astrophysics	Bachelor of Science	Physics
e-Business	Bachelor of e-Business	Computing
Electronics	Bachelor of Arts Bachelor of Science	Electronics
Electronics and Communication Systems (Telecommunications)	Bachelor of Technology (Telecommunications)	Electronics
Telecommunications	Bachelor of Engineering	Electronics
Information Technology and Computing	Bachelor of Information Systems	Computing
Information Technology and Computing	Bachelor of Information Technology Bachelor of Arts Bachelor of Science Bachelor of Computer Science Graduate Diploma in Information Technology Graduate Certificate in Information Technology	Computing Postgraduate Professional Development Program
Lasers, Photonics and Optoelectronics	Bachelor of Technology (Optoelectronics)	Physics
Mathematics	Bachelor of Arts Bachelor of Science	Mathematics
Physics	Bachelor of Arts Bachelor of Science	Physics
Teacher Education	Bachelor of Science DipEd	Computing Mathematics Physics

Degrees Offered

Bachelor of Arts
 Bachelor of Science
 Bachelor of Computer Science
 Bachelor of Information Technology
 Bachelor of Information Systems
 Bachelor of e-Business
 Bachelor of Engineering in Telecommunications Engineering
 Bachelor of Technology (Telecommunications)
 Bachelor of Technology (Optoelectronics)

Graduate Diploma in Information Technology
 Graduate Certificate in Information Technology

Double Degrees

Bachelor of Business Administration with Bachelor of Information Technology
 Bachelor of Commerce – Actuarial Studies with Bachelor of Science
 Bachelor of Information Technology with Bachelor of Laws
 Bachelor of Information Systems with Bachelor of Laws

Entry Requirements

Each degree program has a specific entry requirement, generally expressed as a minimum HSC Universities Admission Index (UAI). For students intending to undertake studies in one of the Division's disciplines, HSC Mathematics Extension 1 or 2 (or a good pass in HSC Mathematics) is highly desirable. Completion also of two units of HSC physics and HSC chemistry is desirable for students aiming at major studies in physics or electronics.

Academic advice for 100-level Mathematics

Students who have studied the equivalent of HSC Mathematics Extension 2, or who obtained HSC Mathematics Extension 1 (Band 3) or HSC Mathematics (Band 6) or equivalent, are qualified to enrol directly in the mainstream unit of study MATH135 Mathematics IA and then MATH136 Mathematics IB. An alternative path into MATH135, for students whose secondary education has not included a detailed introduction to the study of calculus equivalent to the NSW Higher School Certificate Mathematics Extension 1 course, is to obtain a grade of P or better in the unit MATH130 Mathematics IE. Completion of MATH136 at a summer school is convenient for some students.

Some students with a strong background in Extension 2 Mathematics may be permitted to replace MATH135 by MATH132 Mathematics IA (Advanced). Students with a grade of at least P in MATH132 or HD in MATH135 may enrol in MATH133 Mathematics IB (Advanced) in place of MATH136.

Note: The Learning Centre for Numeracy Skills provides academic support, and conducts a program of workshops and refresher courses, for students enrolling in MATH130 and MATH135. One of these courses, in February, offers an alternative entry to MATH135 for students who pass an optional examination.

Bachelor of Science and Bachelor of Arts

The BA differs from the BSc in that there is no requirement that a certain number of credit points must be in units designated as Science. It allows maximum flexibility, only requiring that a coherent study is included in the program. Of course, this in turn requires that prerequisite units at 100 level and 200 level must also be completed.

Note that the BSc and BA have identical coherent studies for this Division.

For descriptions of these degrees, see the general academic advice below and the particular advice given for programs with each of the Departments of Computing, Electronics, Mathematics and Physics.

Academic advice

Note that some programs of study (eg BSc in Astronomy and Astrophysics) have a different UAC code from the generic BSc, but lead to the award only of the BSc. However, students admitted to such programs of study will receive preferential treatment, for example guaranteed access to restricted units or opportunities for research; see the departmental entries below for details.

Selecting a complete program of studies for the BSc or BA should meet a number of criteria, including a minimum number of credit points in various categories, as specified by the Bachelor Degree rules or the study pattern; a set of 300-level units which constitute a coherent study, as specified in the study pattern; completion at appropriate time of prerequisites for the units making up a coherent study (missing HSC prerequisites may present particular difficulty); completion at appropriate time of prerequisites for the units giving the required credit points, some perhaps not closely related to the coherent study. Units chosen at a given level should allow flexibility at a later stage, whether because of a change in direction, or change of degree, or because of failure to satisfy a prerequisite requirement for the selected program, taking account of units that are offered only in one half-year, or only in alternate years. This particularly applies to evening students.

Please refer to the study patterns and academic advice listed under each departmental entry and consult an academic adviser from the relevant department when planning a program of studies. Some departments suggest specific BSc or BA programs which meet the above criteria as far as possible, and these will suit many students; however, some students will put greater weight on some of the above criteria than on others.

Honours programs

An honours program is normally taken full-time over one year, starting in February. In special cases, a program taken part-time over two years or commenced mid-year will be considered by the Dean of Division.

Honours in Computing (BA, BSc, BCompSc, BIT, BIS, BeBus)

The Department of Computing offers the opportunity for exceptional students to undertake an honours program. It is available to all students who have qualified for a degree with a major study in computing with a GPA of at least 2.50 overall and 2.50 at 300 level. The program allows for specialisation in areas such as computer science, computational science (numerical computing), information systems, cryptography, security or language technology. Admission requires a substantial background

in computing and mathematics, usually including at least five 300-level COMP or ISYS units.

Honours students are normally required to take four half-year units and a compulsory half-unit (1.5 cp) on academic writing and presentation, and to attend a range of seminars to complete half of the program. To complete the remaining half, students undertake a project (including a seminar component). The four units are selected from the honours units available and, subject to approval by the honours convener and the relevant section of the University, a limited number may also include: 300-level COMP or ISYS units; 300-level or 400-level MATH, ELEC or INFO units; 800-level ITEC units; relevant units from other Divisions; and, in exceptional circumstances, units from other universities.

Students may choose their project from a list provided by the Department or may propose a topic of their own. The topic must then be approved and a member of staff appointed as their supervisor. Students are required to report on their project at a series of three seminars spread over the time of their candidature. They must present a final, written report on their project by the first day of the relevant undergraduate examination period.

Honours in Electronics (BA/BSc)

Candidates should have a strong background in electronics, including at least a coherent study at 300 level in electronics. They should also have completed substantial studies at 300 level in computing, mathematics or physics or appropriate to their proposed project, which should be related to the research interests of the Electronics Department. Candidates must normally have obtained a grade point average of at least 2.50 in 300-level units; a grade point average of at least 2.50 in all units taken is also required.

Candidates for the honours degree in electronics devote about half their time to a research project supervised by a member of staff of the Division and half to coursework at an advanced level. Honours students are required to submit a thesis embodying the results of their research and to present a seminar on the project. The coursework is expected to include two 400-level electronics units and two other units at 300 level or 400 level, giving a total of about 12 credit points. Interested students should consult Associate Professor Anthony Parker well before the end of their undergraduate year to discuss a possible program.

Areas of research include computer and telecommunication networks; multimedia communication services; photonics; microelectronics systems design including device characteristics, algorithms, architectures, circuit and device design and CAD software systems; signal and image processing; electromagnetics including antenna analysis and design; and collaboration technology.

Honours in Telecommunications (BE, BTech(Telecomm))

See the entries for these degrees under the Department of Electronics.

Honours in Mathematics (BA/BSc)

The normal requirements for entry into honours in mathematics are currently at least four of the units MATH300, MATH334, MATH335, MATH336, MATH337, MATH338, and MATH339. Candidates must normally have obtained a grade point average of at least 2.50 in 300-level units; a grade point average of at least 2.50 in all units taken is also required. Prospective candidates should consult with the Head of Department before October for assignment to an honours supervisor and approval of a program. Joint programs in mathematics and computing are possible.

Honours candidates are normally required to take six half-year units of study. In special circumstances these may include approved units offered within related disciplines such as physics, geophysics, computing, statistics and mathematical logic. In addition students will write an essay or undertake a project on a set topic determined in consultation with supervisors, and present this material in a talk. The essay or project plus talk comprise 35 percent of the honours program.

Areas of research include analytic number theory, algebraic number theory, p-adic analysis, irregularities of distribution, theory of functions, functional analysis, harmonic analysis and representation theory, cryptology, group theory, category theory, wave phenomena, integral equations, non-linear dynamics, partial differential equations, mathematical physics, quantum mechanics and scattering theory.

Honours in Physics (BA/BSc)

The normal minimum entry requirements are a coherent study in physics, preferably including PHYS304, and at least one mathematics unit at 300 level. Candidates must normally have obtained a grade point average of at least 2.50 in 300-level units; a grade point average of at least 2.50 in all units taken is also required. The recommended physics programs given below are the preferred routes to honours in physics. Candidates entering from the BSc in Astronomy and Astrophysics program will be able to enter without a 300-level mathematics unit if they have completed two of COMP238, COMP226, ELEC260 or ELEC280, PHYS306 instead.

Candidates for the honours degree in physics devote about half their time to a research project supervised by a member of staff of the Department and half to coursework at an advanced level. Honours students are required to submit a thesis embodying the results of their research and to present a seminar on the project. The coursework normally includes units making up 12 credit points, with at least 9 credit points at 400 level; details of relevant units are to be found on the Physics website. For candidates entering honours from the BSc in Astronomy and Astrophysics program the coursework will normally include 400-level physics and astrophysics units, and one other 300-level or 400-level unit, giving a total of about 12 credit points. One of these units must be MATH335 if it has not yet been completed. Other recommended units include MATH336, MATH339, PHYS306. Information

concerning the enrolment procedure and the projects offered will be available in the second half of the preceding year.

Areas of research include astronomy, biophysics and biophotonics, experimental and theoretical solid-state physics, optical physics, laser physics and applications, molecular physics, quantum optics, quantum information and communication theory, and fabrication and characterisation of optical or electronic materials.

Honours in Optoelectronics (BTech(Optoel))

See the entry for this degree under the Department of Physics.

Transfer between courses

Any student wishing to change his or her degree program to another degree program must meet the requirements set out in Part 1 of the Handbook, and a *Request to Transfer Degree Course* form must be completed.

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DEPARTMENT OF COMPUTING

The Department of Computing offers a comprehensive teaching program that covers the spectrum from short courses for school teachers, through to undergraduate, honours, postgraduate and PhD study. Specific units of study include traditional computer science, programming languages, software engineering, information systems, through to artificial intelligence, web technologies, e-business, information security and language technology. From 2005, we will be expanding these offerings to include a specialist information-systems degree, the Bachelor of Information Systems (BIS).

Interdisciplinary studies

A range of joint, double and combined degrees is available to students wishing to combine the study of computing and information technology with business administration and actuarial studies. From 2005 it is possible to combine computing with law via the new Bachelor of Information Technology and Bachelor of Laws (BIT LLB) and Bachelor of Information Systems and Bachelor of Laws (BIS LLB) degrees.

Bachelor of Computer Science

This flagship degree provides a rigorous program of study in the theory and applications of computer science. The core study includes programming with modern languages and software-design methods, computer systems with an emphasis on hardware design, operating systems

and networks, and mathematical foundations of computer science. In the final year, students apply their knowledge working with an industry partner.

Majors and coherent studies

The following program satisfies the requirements for this degree, and is currently offered by this Department.

Area of Study	Study Pattern	Code
Information Technology and Computing	Computer Science	COMP01

Entry requirements

Some first-year units, particularly accounting and mathematics have specific entry requirements. Students should refer to the Schedule of Undergraduate Units and to the section ‘Academic advice for 100-level Mathematics’ above.

Professional accreditation

The Bachelor of Computer Science is professionally accredited with the Australian Computer Society.

Academic advice

When choosing optional units, refer to the section ‘Academic advice for all programs’ below.

Honours program

See the section ‘Honours in Computing’ above.

Bachelor of Information Technology

The Bachelor of Information Technology is a comprehensive program that specialises in developing the full range of skills required for a career in computer software development. The core program concentrates on developing practical skills in programming, information systems and software engineering. A choice is then possible from the extensive range of optional units available, including networks, security, web technology, e-commerce technology, systems software, computer hardware and language technology.

Majors and coherent studies

The following program satisfies the requirements for this degree, and is currently offered by this Department.

Area of Study	Study Pattern	Code
Information Technology and Computing	Information Technology	INFT01

Entry requirements

While there are no specific entry requirements, some first-year units, particularly mathematics, do have specific entry requirements. Students should refer to the Schedule of Undergraduate Units and to the section ‘Academic advice for 100-level Mathematics’ above.

Professional accreditation

It is anticipated that the Bachelor of Information Technology will be professionally accredited with the Australian Computer Society.

Academic advice

When choosing optional units, refer to the section ‘Academic advice for all programs’ below.

Honours program

See the section ‘Honours in Computing’ above.

Bachelor of Information Systems

Information Systems involve the study of the technology and application of computing and other information systems to business and non-business (such as government) organisations. Modern organisations, both government and business, deal with large amounts of information and require professionals skilled in the creation and management of systems to handle this information. Such professionals require technical, managerial and wider business skills. This degree prepares students for a career in the development and management of information systems in the context of commercial and government organisations. The early part of the program includes foundational units in information systems and related areas including software engineering, accounting, marketing, economics and telecommunications. Later studies include application implementation, project management, systems analysis and design, databases and systems integration. The program emphasises both the technical aspects of information systems and the management aspects, especially the integration of information systems into core business processes.

Majors and coherent studies

The following program satisfies the requirements for this degree, and is currently offered by this Department.

Area of Study	Study Patterns	Code
Information Technology and Computing	Information Systems	INFT02

Entry requirements

While there are no specific entry requirements, some first-year units that may be included in this degree program do have specific entry requirements. Students should refer to the Schedule of Undergraduate Units.

Professional accreditation

It is anticipated that the Bachelor of Information Systems will be professionally accredited with the Australian Computer Society from 2005.

Academic advice

When choosing optional units, refer to the section ‘Academic advice for all programs’ below.

Honours program

See the section ‘Honours in Computing’ above.

Bachelor of e-Business

An exciting specialist program focusing on the design, implementation and management of commercial activities over the internet and the world wide web. These activities include sharing of business information, maintaining business relationships and conducting business transactions. Three streams — technology, management and multimedia — provide the opportunity to concentrate on a particular aspect of e-business.

Majors and coherent studies

The following programs satisfy the requirements for this degree, and are currently offered by this Department.

Area of Study	Study Patterns	Code
eBusiness	Technology	EBUS01
	Multimedia	EBUS02
	Management	EBUS03

Entry requirements

While there are no specific entry requirements for this degree program, some first-year units, particularly accounting and mathematics, do have specific entry requirements. Students should refer to the Schedule of Undergraduate Units and to the section “Academic advice for 100-level Mathematics” above.

Honours program

See the section “Honours in Computing” above.

Bachelor of Science Bachelor of Arts

These degrees permit flexibility, allowing students to study a range of computing subjects, together with subjects of their choice (mostly science for the BSc). Most students choose to combine computing with closely related sciences such as electronics, mathematics, physics and statistics.

Majors and coherent studies

The following programs satisfy the requirements for these degrees, and are currently offered by this Department.

Area of Study	Coherent Studies	Code
Information	Computing	CMP01
Technology and Computing	Computing	CMP02

Entry requirements

While there are no specific entry requirements, some first-year units, particularly mathematics, do have specific entry requirements. Students should refer to the Schedule of Undergraduate Units and to the section “Academic advice for 100-level Mathematics” above.

Professional accreditation

These degrees are not accredited with the Australian Computer Society (ACS); however, many combinations of units complying with coherent study CMP01 or

CMP02 will contribute towards the ACS requirements for membership.

Academic advice

When choosing units, refer to the section “Academic advice for all programs” below.

Honours program

See the section “Honours in Computing” above.

Bachelor of Business Administration with Bachelor of Information Technology (BBA BIT)

Area of Study	Study Pattern	Code
Business Administration	Information Technology	BUSN016

Bachelor of Commerce - Actuarial Studies with Bachelor of Science (BCom-ActStud BSc)

Area of Study	Coherent Study	Code
Actuarial Studies	Actuarial Studies + Computing	ACT11

Bachelor of Computing and Information Systems Bachelor of Science (in Computing and Information Systems) Bachelor of Arts (in Computing and Information Systems) Bachelor of Science (in Computing)

For a description of these programs, refer to the *Handbook of Undergraduate Studies* for the year when you first enrolled in the degree. Note that the BSc and BA programs, while they had UAC codes separate from the generic BSc and BA and conferred certain privileges, led to the award of the generic BSc or BA.

Bachelor of Science with Diploma of Education (for Mathematics and Information and Computing Technology student teachers)

Majors and coherent studies

The following programs satisfy the requirements for this degree.

Area of Study	Study Pattern	Code
Teacher Education	Information Technology	TESC02
	Information Systems	TESC03

Entry requirements

For information regarding Mathematics prerequisites see the section “Academic advice for 100-level Mathematics” above.

Academic advice

The combination of units leading to the degree of BSc DipEd in the Division has to satisfy the requirements of the Department of Education and Training, the Teacher Education Program (TEP), the BSc rules and the Division. The above study patterns are thought to satisfy these requirements, but students should check the *Teacher Education Program Student Guide* for any recent changes to these requirements.

In choosing elective units, students should consider the academic advice below.

Academic advice for all programs

Most computing students, whatever their degree program, undertake much the same first-year units. The details vary depending on the student's background. ISYS114 Introduction to Systems Design and Data Management (or ISYS154 Introduction to Systems Design and Data Management (Advanced)) and COMP115 Introduction to Computer Science (or COMP155 Introduction to Computer Science (Advanced)) are entry points to mainstream computing units. COMP125 Fundamentals of Computer Science (or COMP165 Fundamentals of Computer Science (Advanced)) continues the programming aspects of these units as well as introducing computer architecture.

ISYS123 Introduction to Information Systems and Technologies is an introductory unit of study for students with little or no experience using computers. It also provides an introduction to Information Systems, which is the use of Information Technology in organisations such as businesses.

Most computing students must also undertake some mathematics, generally comprising one first-year unit and one second-year unit. Some programs require an additional first-year mathematics unit.

The programs for computing degrees consist of core units, optional core units and electives. The core and optional core units are detailed in the coherent studies and study patterns in the Schedule of Undergraduate Programs. The units listed below are core in some programs and, for other programs, are recommended electives that provide the opportunity for students to specialise in the listed areas.

Where a coherent study or study pattern specifies a particular unit, it often happens that a unit no longer offered has an acceptable alternative; this is particularly relevant for students transferring between degrees. The following lists such equivalent units:

Current Unit	Alternative
COMP115	COMP124
COMP347	COMP327
COMP347	COMP341
ELEC166	ELEC176
ISYS114	COMP114
ISYS114	COMP124
ISYS123	COMP123
ISYS154	COMP154

ISYS224	COMP224
ISYS227	COMP227
ISYS326	COMP326
ISYS346	COMP346
MPCE360	MPCE361

Information Systems

ISYS114 (or ISYS154); COMP224; COMP227; COMP326; COMP329; GEOS264; GEOS371

Software Development and Software Engineering

COMP115 (or COMP155); COMP125 or COMP165; COMP225; COMP227; COMP229; COMP332; COMP342; COMP340; COMP345; COMP346

Networks and Security

COMP247; COMP249; COMP341; COMP343

Language Technology

SLP148 (interdisciplinary unit); COMP248; COMP348; COMP349; COMP448

Computer Hardware

ELEC166; COMP226; ELEC274; ELEC280; INFO240; ELEC374; ELEC375

Physics, Photonics and Optoelectronics

PHYS149; PHYS220; OPTO200.

Formal Logic

PHIL134; PHIL281; COMP329

Accounting

ACCG250; ACCG355

These units are recommended to students with interests in information systems and general commercial applications. Introductory accounting units have restrictions on entry; refer to the Schedule of Undergraduate Units for details.

Statistics

STAT170; STAT171; STAT270; STAT278; STAT279; STAT329; STAT378; STAT379

Management

MPCE360

Programs and units

Approved programs of undergraduate study (majors and coherent studies) are listed in the Schedule of Undergraduate Programs. The units of undergraduate study are listed in the Schedule of Undergraduate Units, and brief descriptions are given in the section entitled 'Descriptions of Undergraduate Units'.

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DEPARTMENT OF ELECTRONICS

The Department of Electronics teaching programs are in the areas of electronics, communication systems, and telecommunications engineering. These areas of study play an important role in business and manufacturing, and are about building and using systems for productive and leisure activities.

Electronics at Macquarie University is underpinned by a strong research background in the areas of microelectronics, microwave devices, networks, photonics and electromagnetics.

The four-year Bachelor of Engineering program is intended to provide an accredited qualification. It focuses on the engineer's art of problem solving in the context of telecommunications, leading to a flexible career path. The three-year Bachelor of Technology program emphasises the management of telecommunications technology. The Bachelor of Science programs offer a more general electronics education that can be combined with other areas of study.

Bachelor of Science Bachelor of Arts

Some students will prefer the greater flexibility of the BSc or the BA to the more specialised BE or BTech.

Majors and coherent studies

The following programs satisfy the requirements for these degrees, and are currently offered by this Department.

Area of Study	Coherent Studies	Code
Electronics and Communication Systems	Electronics	ELE01
(Telecommunications)	Electronics	ELE02

Entry requirements

There are no HSC prerequisites for ELEC166 Introduction to Electronic Systems, which is the entry point for higher-level Electronics units. Please refer however to its description and to the section "Academic advice for 100-level Mathematics" above.

Academic advice

A wide range of BSc programs with some emphasis on electronics is possible, as is a BA or BSc program with considerable electronics content. The remaining subjects could be chosen from many fields, but an emphasis on computing or on physics would be most common. Students with a particular interest in electronics should consider the BE and BTech programs offered by the Division. Students who do not meet the requirements to enrol in the above degree programs may include most of the same units of study in a BSc program with a major study in electronics, for example as recommended below. Transfer to the second year of the BE or BTech is possible after appropriate performance in the first year of the BSc and other programs.

Complementing a major study in electronics, enough PHYS units to meet the requirements for a coherent study in physics, or COMP or ISYS units for computing, may be included as follows.

Year 1

1st half-year: MATH135 or MATH132, PHYS140, COMP115 or COMP155, CHEM101 or STAT171 or STAT170.

2nd half-year: MATH136 or MATH133, PHYS143, COMP125 or COMP165, ELEC166.

Year 2

1st half-year: MATH235, ELEC290, COMP225, PHYS201 or COMP247 or COMP229.

2nd half-year: ELEC274, ELEC280 or COMP226, PHYS202 or COMP224 or COMP227, MATH236 or MATH237.

Note also OPTO200, INFO240.

Year 3

1st half-year: ELEC309, ELEC374, ELEC376, PHYS301 or COMP341 or COMP342, PHYS303 or OPTO300 or ELEC324 or COMP326 or COMP341 or COMP342.

2nd half-year: ELEC310, ELEC321, PHYS304 or ELEC345 or COMP329, PHYS306 or COMP333 or COMP343.

Honours program

For a description of the honours program students should refer above to the section 'Honours programs' for the Division.

Bachelor of Engineering

Students admitted to the Telecommunications Engineering program of the Bachelor of Engineering undertake a four-year program of full-time study. They may choose to specialise in one of three areas: electronics/photonics, digital systems, or networks. To be eligible for award of the degree, students are also required to complete 12 weeks of approved industry experience.

It is possible to transfer to the BE course without loss of credit after one year of study from most other degree courses within the Division of Information and Communication Sciences. Students also have the option of transferring from the BE program to another degree if they wish to complete a degree in three years. The conditions for transfer are set out under 'Student Information'.

Majors and coherent studies

The following program satisfies the requirements for this degree, and is currently offered by this Department.

Area of Study	Study Pattern	Code
Telecommunications Engineering	Telecommunications Engineering	TELC01

Entry requirements

It should be noted that, without a mathematics mark qualifying them for direct entry to MATH135, it might be difficult for students to graduate in four years. Please refer to the section ‘Academic advice for 100-level Mathematics’ above.

Academic advice

Students whose mathematical background is inadequate for direct entry to MATH135 will need to modify this program. One possibility is to complete MATH130 in the first half-year, MATH135 in the second half-year, and MATH136 at a summer school between the first and second years, making it still possible to complete the program in four years.

When choosing optional core units, students should ensure that they will be meeting prerequisite requirements for later planned options.

Honours program

Honours in the BE is awarded to students with outstanding performance over the four years of the degree program. To be considered for Honours in Engineering, students should complete ELEC414 Engineering Thesis II.

Bachelor of Technology (Telecommunications)

This three-year degree is about the science and technology of collecting and transmitting information, including human communication. This is a basic element of information technology (IT). There is a strong demand in management, finance, commerce, engineering and manufacturing for graduates trained in IT. The BTech(Telecomm) provides a distinctive pathway for IT education with the outstanding feature of a technical project carried out by student teams supervised by industry.

Majors and coherent studies

The following program satisfies the requirements for this degree, and is currently offered by this Department.

Area of Study	Study Pattern	Code
Electronics and Communications Systems (Telecommunications)	Telecommunications	INCS02

Entry requirements

BTech students should note that, without an adequate Mathematics background (see the section ‘Academic advice for 100-level Mathematics’ above), it will be difficult to graduate in the minimum three years. HSC Chemistry or HSC Physics is recommended.

Academic advice

The Technical Project unit, INFO310, is a critical core unit of the BTech degree program, and has restricted entry. One prerequisite is 48 credit points with a GPA of 2.00 or greater. Students who have a GPA less than this

may have to transfer to another degree, for example the BSc.

Honours program

Students who have completed the BTech (Telecommunications) program are encouraged to enrol in an honours-year program. This will be based on coursework (12 credit points) and on a thesis describing a research project (equivalent to 12 credit points).

The coursework (at 300 level and 400 level) will be chosen from the areas of computing, electronics, mathematics and statistics; there will be some scope for choice of coursework by students, depending on their background, interests and career aspirations.

Information concerning the projects offered to prospective honours students will be made available in the second half of the year before enrolment in honours.

The normal entry requirements are a grade point average of at least 3.00 in 300-level units and a grade point average of at least 2.50 over all units of study taken.

The program is available on a full-time basis only.

Bachelor of Technology (Information and Communication Systems)

For a description of this program, refer to the Handbook of Undergraduate Studies for the year when you first enrolled in this degree.

Programs and units

Approved programs of undergraduate study (majors and coherent studies) are listed in the Schedule of Undergraduate Programs. The units of undergraduate study are listed in the Schedule of Undergraduate Units and brief descriptions are given in the section entitled ‘Descriptions of Undergraduate Units’.

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DEPARTMENT OF MATHEMATICS

The aim of the undergraduate teaching program in the Department of Mathematics is twofold: to provide training to students who aspire to a career in mathematics as well as to provide service teaching to students who major in other areas. In particular, the Department aims to train students in problem solving and other generic skills as well as mathematical techniques. Students who major in mathematics may pursue further studies by enrolling in honours and postgraduate programs, and can expect to find employment in the academic, scientific, technical and financial sectors.

Interdisciplinary studies

The BCom-ActStud BSc (in Mathematics) is available to exceptional students wanting to combine Actuarial Studies and Mathematics in a double-degree program. See below.

Bachelor of Science

Most students intending to major in mathematics enrol for a Bachelor of Science degree, supplementing their mathematics units of study with units chosen from other science disciplines, such as physics, computing, electronics, statistics, chemistry, biology or the earth sciences.

Majors and coherent studies

The following programs satisfy the requirements for this degree, and are currently offered by this Department.

Area of Study	Coherent Studies	Code
Mathematics	Mathematics (i)	MAT03
	Mathematics (ii)	MAT04

Entry requirements

The Division offers greater flexibility to students admitted to the BSc in Advanced Mathematics. Special lectures, accelerated progress, and extra units of study in mathematics are available. Students are selected on the basis of their UAI (over 95 required for 2004 entry).

Students in the BCom – ActStud BSc (in Mathematics) are required to have high passes in HSC mathematics and a high UAI (over 97 required for 2004 entry to the BCom – ActStud).

For further information regarding mathematics prerequisites see the section ‘Academic advice for 100-level Mathematics’ above.

Academic advice

Note that, while the following recommended program applies particularly to full-time day students, part-time students may undertake a very similar program on an evening and late-afternoon basis, spreading the mathematics component over five years or more. Details of evening and late-afternoon offerings are given in the Schedule of Undergraduate Units.

Year 1

1st half-year: MATH135, PHYS140, COMP115 or COMP155;

2nd half-year: MATH136 or MATH133, PHYS143, COMP125 or COMP165;

and 5 to 7 additional credit points, normally including STAT171.

Year 2

1st half-year: MATH235, MATH237, COMP238 and about 3 additional credit points.

2nd half-year: MATH236, MATH239 and about 6 additional credit points.

The additional credit points should include statistics.

Year 3

A selection of units of study, the majority in the ranges MATH300-MATH349, COMP321-COMP351, chosen in consultation with an academic adviser.

Note the requirements for entry into honours in mathematics or in computing.

Honours program

For a description of the honours program students should refer above to the section ‘Honours programs’ for the Division.

Bachelor of Arts

Students intending to major in mathematics and who enrol for a Bachelor of Arts degree may supplement their mathematics units of study with units chosen from any discipline within the University including statistics, physics and computing.

Majors and coherent studies

The following programs satisfy the requirements for this degree, and are currently offered by this Department.

Area of Study	Coherent Studies	Code
Mathematics	Mathematics (i)	MAT01
	Mathematics (ii)	MAT02

Entry requirements

For information regarding Mathematics prerequisites see the section ‘Academic advice for 100-level Mathematics’ above.

Academic advice

Note that, while the following recommended program applies particularly to full-time day students, part-time students may undertake a very similar program on an evening and late-afternoon basis, spreading the mathematics component over five years or more. Details of evening and late-afternoon offerings are given in the Schedule of Undergraduate Units.

Year 1

1st half-year: MATH135, COMP115 or COMP155, STAT171;

2nd half-year: MATH136 or MATH133, COMP125 or COMP165

and approximately 9 additional credit points chosen from 100-level offerings in two further disciplines.

Year 2

As for the Bachelor of Science above.

Year 3

As for the Bachelor of Science above.

Honours program

For a description of the honours program students should refer above to the section 'Honours programs' for the Division.

Bachelor of Science in Advanced Mathematics program

The program of studies with UAC code 300507, called B Science in Advanced Mathematics, leads to the award of a generic BSc. However, the BSc (in Advanced Mathematics) offers opportunities in mathematics beyond those available in the BSc. It is designed for students wishing to major in mathematics (probably with a view to doing honours) or in some related discipline. Students normally enter through the UAC on the basis of their UAI (over 95 required for 2004 entry) but there are some opportunities for students with very good grades in mathematics to transfer into the program at a later stage. Special arrangements can also be made for students wishing to participate in the advanced stream who want a degree other than the BSc (in Advanced Mathematics). Another possibility is a double degree (four years minimum) in Actuarial Studies (BCom) with Advanced Mathematics (BSc); see the corresponding entry above or under 'Department of Actuarial Studies' in the Division of Economic and Financial Studies.

Majors and coherent studies

The following program satisfies the requirements for this degree, and is currently offered by this Department.

Area of Study	Study Pattern	Code
Mathematics	Advanced	MATH02

Entry requirements

Admission to the BSc (in Advanced Mathematics) or an equivalent UAI, plus a good result in HSC Mathematics Extension 2, is required for entry into MATH132 Mathematics IA (Advanced).

Honours program

For a description of the honours program students should refer above to the section 'Honours programs' for the Division.

BCom – Actuarial Studies with BSc (in Mathematics)

This double degree pairs the Bachelor of Commerce - Actuarial Studies with the BSc (in Mathematics). The recommended program of study permits completion of the double-degree program in a much shorter time than if each degree were taken sequentially. A UAI of over 97 was required for 2004 entry to the BCom – ActStud.

See under the Division of Economic and Financial Studies for further details.

Majors and coherent studies

The following program satisfies the requirements for this degree.

Area of Study	Coherent Study	Code
Actuarial Studies	Actuarial Studies + Mathematics	ACT12

Bachelor of Arts/Bachelor of Science with Diploma of Education (for student Mathematics teachers)

Majors and coherent studies

The following program satisfies the requirements for this degree.

Area of Study	Coherent Study	Code
Teacher Education	Teacher Education - Various	TED01

Entry requirements

For information regarding Mathematics prerequisites see the section 'Academic advice for 100-level Mathematics' above.

Academic advice

The combination of units leading to the degree of BA DipEd or BSc DipEd in the Division has to satisfy the requirements of the Department of Education and Training, the Teacher Education Program (TEP), the BA or BSc rules and the Division. The following recommended program is thought to satisfy these requirements, but students should check the Teacher Education Program Student Guide for any recent changes to these requirements.

Year 1

1st half-year: MATH135 or MATH132, EDUC105, COMP115 or COMP155, and up to 4 additional credit points.

2nd half-year: MATH136 or MATH133, EDUC106, COMP125 or COMP165, and up to 4 additional credit points.

The additional credit points may comprise a full 100-level offering from another discipline; however PHYS140 and STAT171 should be completed by the end of year 2.

Year 2

1st half-year: MATH235, MATH237, COMP238, and up to 4 additional credit points.

2nd half-year: MATH236, MATH239, and up to 7 additional credit points.

Students seeking employment with the Department of Education and Training after graduation must also include TEP246 in their program.

Year 3

1st half-year: MATH3XX, STAT272, EDUC264, TEP282 and up to 3 additional credit points.

2nd half-year: MATH3XX, STAT271, EDUC258, TEP283 and up to 3 additional credit points.

(MATH3XX are units in the range MATH300–MATH349.)

It may be possible, or even necessary, to replace TEP282 and TEP283 by TEP295.

Year 4

1st half-year: MATH3XX, MATH3XX, TEP429 and up to 3 additional credit points.

2nd half-year: MATH3XX, MATH3XX, TEP430 and up to 3 additional credit points.

Full year: TEP412.

It may be possible, or even necessary, to replace TEP412 by TEP414 plus TEP416.

(For the BScDipEd option the additional credit points must be chosen to meet the requirements for the number of approved Science units successfully completed.)

Bachelor of Science with Diploma of Education (for student Mathematics teachers)

Majors and coherent studies

The following program satisfies the requirements for this degree.

Area of Study	Study Pattern	Code
Teacher Education	Mathematics	TESC01

Entry requirements

For information regarding Mathematics prerequisites see the section 'Academic advice for 100-level Mathematics' above.

Academic advice

The combination of units leading to the degree of BSc DipEd in the Division has to satisfy the requirements of the Department of Education and Training, the Teacher Education Program (TEP), the BSc rules and the Division. The above study pattern is thought to satisfy these requirements, but students should check the *Teacher Education Program Student Guide* for any recent changes to these requirements.

In choosing elective units, students might well include core units from the study pattern for Mathematics and ICT teachers; see under the Department of Computing.

Programs and units

Approved programs of undergraduate study (majors and coherent studies) are listed in the Schedule of Undergraduate Programs. The units of undergraduate study are listed in the Schedule of Undergraduate Units and brief descriptions are given in the section entitled 'Descriptions of Undergraduate Units'.

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DEPARTMENT OF PHYSICS

Physics is fundamental to all the natural sciences and plays a central role in the development of new technologies. Theoretical and experimental research together explore basic questions about the intrinsic laws of the universe. The results of this research are applied to interdisciplinary fields and to practical use. Physics is a core discipline for all science and technology students, and challenges students to explore the underlying principles of all physical phenomena as well as to develop problem-solving skills, good laboratory techniques, and skills in numerical analysis, technical writing and oral communication.

Macquarie University's Physics Department employs high-quality and innovative approaches to teaching with a focus on the generic skills which support the discipline. Teaching is underpinned by excellent research and strong links and collaborations with other organisations and industry, both nationally and internationally.

Distance education program

Some units in physics are available to students in the external mode (see PHYS159 and PHYS270), and many units in physics provide supporting material on the internet.

**Bachelor of Science
 Bachelor of Arts**

The BSc and BA degrees (with a coherent study in Physics) offer students a strong physics program, including the possibility of a major study associated with theoretical or mathematical physics, or with astronomy and astrophysics.

Majors and coherent studies

The following programs satisfy the requirements for these degrees, and are currently offered by this Department.

Area of Study	Coherent Studies	Code
Physics	Physics	PHY01
	Mathematical Physics	PHY02
	Physics	PHY03
	Mathematical Physics	PHY04

Entry requirements

A Physics program requires HSC Mathematics Band 4, or satisfactory completion of MATH130 Mathematics IE, before enrolling in the mainstream units PHYS140 and PHYS143. While HSC Physics or Chemistry is desirable, it is not essential for entry to a Physics program.

For information regarding Mathematics prerequisites see the section 'Academic advice for 100-level Mathematics' above.

Professional accreditation

The Australian Institute of Physics, the professional body representing physics in Australia, has accredited the BSc degree (with a coherent study in Physics) and the

BTech(Optoel) degree as Physics degrees under a scheme of regular reviews.

Academic advice

Note that, while the following recommended programs apply particularly to full-time day students, part-time students may undertake study in physics to 200 level on a composite-mode or evening or late-afternoon basis. Such students should complete MATH135 in their first year of studies and begin their physics studies with PHYS140 and PHYS143 in an even-numbered year (eg 2006). However, evening offerings in 100-level physics are under review. Details of evening and composite-mode offerings are given in the Schedule of Undergraduate Units.

Students who do not qualify for direct entry to MATH135 must enrol first in MATH130. In order to obtain the minimum mathematics prerequisite for 300-level physics (MATH235) they will then need to complete three mathematics units by evening study. An alternative is to enrol in the summer-school offering of MATH136, which permits enrolment in all higher-level mathematics units by day study.

Year 1

These recommended programs require at least HSC Mathematics Band 4, but students with a strong mathematical background may substitute MATH132 and/or MATH133 for MATH135 and/or MATH136; see the section 'Academic advice for 100-level Mathematics' above.

1st half-year: MATH130 or MATH135, PHYS140.

2nd half-year: MATH135 or MATH136, PHYS143.

1st or 2nd half-year: ELEC166 and 6 to 9 additional credit points, normally selected from CHEM101, CHEM103, ISYS123 or COMP115 or COMP155, COMP125 or COMP165.

Year 2

1st half-year: MATH136 if not yet completed or else MATH235, PHYS201, and 6 or 7 additional credit points, possibly including PHYS220 and/or PHYS242 and/or PHYS270.

2nd half-year: PHYS202, ELEC280 or PHYS278, and 6 or 7 additional credit points; MATH235 is essential if not yet completed, or else MATH236 is strongly recommended.

Full year: OPTO200 is recommended.

Some students may include PHYS246 in the second half-year.

Year 3

1st half-year: PHYS301, PHYS303 and 6 or 7 additional credit points; MATH335 is recommended. (Consider OPTO300, PHYS377, ELEC376 as possible options.)

2nd half-year: PHYS304, PHYS306 or PHYS378 and 6 or 7 additional credit points, which should include

MATH236 (strongly recommended) or ELEC280 (if not already completed).

(Note that the suggested options meet the requirements for entry to honours in physics.)

Mathematical Physics coherent study

Year 1

This recommended program requires HSC Mathematics Extension 1 (or a good pass in HSC Mathematics, or the equivalent) and an appropriate science background; see earlier notes under 'Entry requirements' and immediately above.

1st half-year: MATH132 or MATH135, PHYS140, ISYS123 or COMP115 or COMP155, and 3 or 4 additional credit points, normally chosen from CHEM101, ELEC166, PHIL137, STAT171.

2nd half-year: MATH133 or MATH136, PHYS143, and 6 or 7 additional credit points, normally chosen from COMP125 or COMP165, ELEC166, STAT270.

Year 2

1st half-year: MATH235, MATH237, PHYS201, PHYS220.

2nd half-year: MATH236, PHYS202, and 6 or 7 additional credit points. Some students may include PHYS246 in the second half-year.

Year 3

1st half-year: MATH335, PHYS301 and 6 or 7 additional credit points, normally MATH337, PHYS303.

2nd half-year: MATH336, MATH339, PHYS304, PHYS378.

Honours program

For a description of the honours program students should refer above to the section 'Honours programs' for the Division.

Bachelor of Science

Astronomy and Astrophysics program

The program of studies with UAC code 300529, called B Science in Astronomy and Astrophysics, leads to the award of a generic BSc. However, students admitted to this program may enrol in the unit PHYS270 Astronomy in their first year of study.

Majors and coherent studies

The following program satisfies the requirements for this degree, and is currently offered by this Department.

Area of Study	Study Pattern	Code
Astronomy and Astrophysics	Astronomy and Astrophysics	ASTR01

Entry requirements

This program requires HSC Mathematics Band 4, or satisfactory completion of MATH130 Mathematics IE,

before enrolling in the mainstream units PHYS140 and PHYS143.

For information regarding Mathematics prerequisites see the section ‘Academic advice for 100-level Mathematics’ above.

Professional accreditation

The BSc degree program in Astronomy and Astrophysics has been accredited by the Australian Institute of Physics as a Physics degree. There is no separate Astronomy accreditation available.

Academic advice

This program requires direct admission to MATH135 Mathematics IA and an appropriate science background. It can be modified to allow for students with a weaker mathematics background, but may require four years of study.

Students should normally choose their elective units from the lists of optional core units.

Honours program

For a description of the honours program students should refer above to the section ‘Honours programs’ for the Division.

Bachelor of Arts/Bachelor of Science with Diploma of Education (for student Science teachers majoring in Physics)

Majors and coherent studies

The following program satisfies the requirements for this degree.

Areas of Study	Coherent Study	Code
Teacher Education	Teacher Education - Various	TED01
Teacher Education	Physics	TESC04

Entry requirements

A Physics program requires HSC Mathematics Band 4, or satisfactory completion of MATH130 Mathematics IE, before enrolling in the mainstream units PHYS140 and PHYS143. While HSC Physics or Chemistry is desirable, it is not essential for entry to a Physics program.

For information regarding Mathematics prerequisites see the section ‘Academic advice for 100-level Mathematics’ above.

Academic advice

The combination of units leading to the degree of BA DipEd or BSc DipEd in the Division has to satisfy the requirements of the Department of Education and Training, the Teacher Education Program (TEP), the BA or BSc rules and the Division. The following recommended program is thought to satisfy these requirements, but students should check the *Teacher Education Program Student Guide* for any recent changes in these requirements.

Students enrolled in the special course for Science/Physics Teachers (study pattern TESC04) could use this recommended program as a guide, but should also ensure that they meet the minimum requirements as specified by the study pattern.

Year 1

1st half-year: PHYS140, MATH135, CHEM101, BIOL114.

2nd half-year: PHYS143, MATH136, CHEM103, BIOL115.

Year 2

1st half-year: PHYS201, PHYS270, MATH235, EDUC105.

2nd half-year: PHYS202, PHYS278, MATH236, EDUC106.

Year 3

1st half-year: CHEM207, PHYS301, EDUC261, TEP282.

2nd half-year: CHEM208, PHYS304 or CHEM329 or GEOS309 or MATH336, EDUC262, TEP283.

Students seeking employment with the Department of Education and Training after graduation must also include TEP246 in their program; it is core for the Science Teaching study pattern. It may be possible, or even necessary, to replace TEP282 and TEP283 by TEP295 and, perhaps, one of ISYS123, COMP115 or COMP155, ELEC166, GEOS112.

Year 4

1st half-year: PHYS303, PHYS377, TEP433.

2nd half-year: PHYS306, PHYS378, TEP434.

Full year: TEP412.

It may be possible, or even necessary, to replace TEP412 by TEP414 plus TEP416; this is core for the Science Teaching study pattern. It would be desirable to also include one of ISYS123, COMP115 or COMP155, ELEC166, GEOS112, or TEP246 (see note above).

Bachelor of Technology (Optoelectronics)

The Bachelor of Technology (Optoelectronics) is the premier degree in its field, and offers students the chance to learn about the fields of lasers, photonics and optoelectronics. Students gain practical experience and theoretical understanding in the fundamentals and applications of a range of technologies based on optics and electronics. Generic skills in written and oral communication, and practical laboratory skills, are emphasised in the degree program. A unit in technology management and placement in an industrial project give a strong industry focus to the degree.

Majors and coherent studies

The following program satisfies the requirements for this degree, and is currently offered by this Department.

Area of Study	Study Pattern	Code
Lasers, Photonics & Optoelectronics	Optoelectronics	OPTL01

Entry requirements

BTech students are selected on the basis of their UAI or equivalent (over 75 required for 2004 entry). However they should note that, without a mathematics mark qualifying them for direct entry to MATH135 (see below), it might be difficult to graduate in three years. This program requires HSC Mathematics Band 4, or satisfactory completion of MATH130 Mathematics IE, before enrolling in the mainstream units PHYS140 and PHYS143.

For information regarding Mathematics prerequisites see the section 'Academic advice for 100-level Mathematics' above.

Professional accreditation

The BTech(Optoel) degree is accredited by the Australian Institute of Physics as a Physics degree, and has also received accreditation as a certificate course by Engineers Australia (IEAust).

Academic advice

Students whose mathematical background is inadequate for direct entry to MATH135 or PHYS140 will need to modify this program, and should seek advice from the Director of the program.

Honours program

Students completing a Bachelor of Technology (Optoelectronics) program or some other relevant degree program are encouraged to enrol in the BTech (Honours) program in Optoelectronics. Normal entry requirements are a grade point average of at least 2.50 in 300-level units and a grade point average of at least 2.50 over all units of undergraduate study. Students who do not meet these formal requirements but are strongly committed to undertaking the honours program may be admitted on the recommendation of the Dean of Division.

The program comprises 12 credit points of coursework and a research project, each weighted equally in the final assessment. The coursework normally includes 400-level units in optoelectronics and physics, details of which may be found on the Physics website (9 credit points in total); one further unit (3 credit points) may be chosen from 400-level electronics or information and communication systems or 300-level physics, electronics, mathematics or computing, making up a total of at least 9 credit points in 400-level units.

The research projects will be chosen from relevant topics available within the Division (and in exceptional circumstances from topics available outside the Division or University). Projects will be assessed by way of a thesis. Details of research topics and coursework content will be

made available before the end of the year preceding enrolment.

Programs and units

Approved programs of undergraduate study (majors and coherent studies) are listed in the Schedule of Undergraduate Programs. The units of undergraduate study are listed in the Schedule of Undergraduate Units, and brief descriptions are given in the section entitled 'Descriptions of Undergraduate Units'.

Department of Physics enquiries

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POSTGRADUATE PROFESSIONAL DEVELOPMENT PROGRAM

Through its Postgraduate Professional Development Program, the Division offers a Graduate Certificate in Information Technology and a Graduate Diploma in Information Technology. These programs are suitable for graduates from other disciplines who seek university qualifications in information technology. The programs feature course material in an intense, accelerated format, delivered mainly online with some on-campus components.

A limited selection of units for these programs is available in 2005. Units available in these programs cannot be taken for credit towards the bachelor degrees offered by the Division of ICS.

Candidates for these programs must have a Bachelor degree in any discipline from an Australian university (or equivalent) with a GPA of 2.50 out of 4.00. Candidates are advised that the course material assumes that they will understand basic mathematical concepts, be able to apply logical abstraction to practical problems, and be familiar with using computers and common office software, including installing and configuring new applications. Candidates who do not have a Bachelor degree but who do have substantial (minimum 3 years) professional employment experience in Information Technology or Computing may still be eligible for entry.

Application forms are available from the Postgraduate Studies Section, Lincoln Building, Macquarie University, NSW 2109, telephone (02) 9850 7488.

Graduate Certificate in Information Technology

This program is available for part-time study only in 2005. The program of study requires satisfactory completion of ITEC100 and ITEC101. Students must complete a further 8 credit points: 4 credit points from any 100-level, 200-level or 300-level ITEC units, and 4 credit points from any 200-level and 300-level ITEC units.

Graduate Diploma in Information Technology

This program is available in 2005 for full-time study commencing in the first half-year, or part-time study, commencing in the second half-year. The program of study requires satisfactory completion of 24 credit points from the prescribed core units, as well as 4 credit points chosen from 200-level, 300-level or 800-level ITEC units, and 4 credit points from 300-level or 800-level ITEC units.

100 level

Core

ITEC100 Introduction to Software Development

ITEC101 Introduction to Systems Design and Data Management

ITEC102 Networks and Data Communications

200 level

Core

ITEC200 Foundations of Software Engineering and either

ITEC201 Design and Development of Database Systems or

ITEC202 Requirements Analysis and Systems Design

300 level

Core

ITEC300 IT Management and Professional Practice

Postgraduate Professional Development Program enquiries

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Division of Law

Law Programs

The Division of Law offers, in conjunction with the Department of Public Law in the Division of Humanities, a variety of courses, including both internal and external degree courses in law as Combined Law programs, or by distance to mature age students. Some individual units may also be available to students in other programs.

In the earlier part of their course combined law students are required to undertake the study of law in conjunction with studies in other disciplines.

The Division is committed to producing graduates who are informed, reflective and ethical citizens and professionals. It seeks to achieve international recognition for research excellence with a particular emphasis on interdisciplinary scholarship and to enhance the relationship with the local, national and international community, the legal profession and alumni.

All LLB programs at Macquarie University are accredited programs for the purpose of admission to practise as a legal practitioner in New South Wales. If a person seeks admission to practise it is necessary to complete a program of practical legal training in addition to the completion of an accredited program of legal study (see below 'Professional accreditation'). Opportunities for lawyers exist outside the field of private practice, especially in government and commerce. For those who wish to enter the Public Service as legal officers it is essential, and for those who wish to enter commerce as legal advisers ('in-house lawyers') it is advisable to obtain a professional qualification. Of course there are others who may find a knowledge of the law invaluable in careers in politics, diplomacy, commerce or industry. However, the final two-year segment of all the combined degree courses has been designed on the assumption that almost all students will be seeking a professional qualification, whether they intend to practise law or not.

Degrees Offered

The following awards in law are offered by this Division as full-time Combined Law programs:

Bachelor of Arts/Bachelor of Law (BA LLB)

Bachelor of Arts(Psychology)/Bachelor of Law (BA(Psych) LLB)

Bachelor of Applied Finance/Bachelor of Law (BAppFin LLB)

Bachelor of Business Administration/Bachelor of Law (BBA LLB)

Bachelor of Commerce/Bachelor of Law (BCom LLB)

Bachelor of Commerce (Actuarial Studies)/Bachelor of Law (BCom-Actuarial LLB)

Bachelor of Commerce (Accounting)/Bachelor of Law (BCom-Accounting LLB)

Bachelor of Commerce (Marketing)/Bachelor of Law (BCom-Marketing LLB)

Bachelor of Economics/Bachelor of Law (BEc LLB)

Bachelor of Environmental Management/Bachelor of Law (BEnvMgmt LLB)

Bachelor of Environmental Science/Bachelor of Law (BEnvSc LLB)

Bachelor of Information Systems/Bachelor of Law (BIS LLB)

Bachelor of Information Technology/Bachelor of Law (BIT LLB)

Bachelor of Media/Bachelor of Law (BMedia LLB)

Bachelor of Science/Bachelor of Law (BSc LLB)

Bachelor of Social Science/Bachelor of Law (BSoc LLB)

The LLB program is also offered as a part-time program by distance education to mature-age students (see below).

Majors and coherent studies

The requirements for completion of the program for the combined award of the Combined Law degrees are set out under Degrees and Diplomas Offered in this Part of the Handbook and in the Schedule of Undergraduate Programs.

Prescribed units

In all law programs there is a prescribed sequence of units and a wide range of optional units at senior level. 74 credit point of units with the prefix LAW are required to complete the LLB part of each program.

For students commencing their studies in 2005:

LAW104; LAW114; LAW203; LAW204; LAW205; LAW206; LAW314* and LAW 315* or LAW311* and LAW312*; LAW316 and LAW317; LAW405; LAW 406; LAW500.

* Either LAW 314 and LAW 315 Constitutional Law and Administration or LAW 311 and LAW 312 Public Law must be completed.

For students who commenced their studies in 1998 to 2004 inclusive:

LAW103; LAW113; LAW204, LAW205, LAW206, LAW314* and LAW315* or LAW311* and LAW312*; LAW316 and LAW317; LAW405; LAW406; LAW500; LAW518.

* Either LAW 314 and LAW 315 Constitutional Law and Administration or LAW 311 and LAW 312 Public Law must be completed.

For students who commenced their studies in 1990 and before 1998, the prescribed sequence of required units is as follow:

LAW112; LAW203; LAW204; LAW314* and LAW315* or LAW311* and LAW312*; LAW316 and LAW317; LAW405; LAW406; LAW414; LAW500; LAW518.

* Either LAW314 and LAW315 Constitutional Law and Administration or LAW311 and LAW312 Public Law must be completed.

There are transitional provisions for candidates taking the replaced units. Contact an academic adviser for further advice.

For students who commenced their studies in 1989 or earlier, refer to the Handbook for 2003 or earlier for the prescribed sequence of units in Law. Academic advice should also be sought in the Division of Law.

How long will it take to complete the degree program?

The Combined Law programs are designed as five-year programs. The Distance Law program is a part-time program designed to be completed in six years.

Program of registration

During the first three years of their program, students are advised to register in the Division where they intend to pursue the greater part of their non-law studies. This is because students in the early years of their program are required to follow a prescribed sequence of LAW units and require academic advice as to the choices they must make in the rest of their course. Academic advisers from the Division of Law are available to assist all students in the law programs, and can offer advice as to what other areas of study may be most beneficial to new students. Students will normally transfer their registration to the Division of Law in their fourth year, when academic advisers from the Division are better placed to offer specific guidance.

Sequence of elective units in Law

After completion of the prescribed sequence of units from 100 to 300-level, students will normally proceed to complete the minimum of 74 credit points of LAW units for the LLB degree during the following two years.

Students may pursue a cluster of senior elective units in particular areas, for example environmental law, international law, commercial law, legal theory, family law, property law and legal history. Alternatively, students may take a broad range of elective units across the spectrum of units offered in the Division. Prerequisites are only set where considered essential, so that students will have considerable flexibility in choosing the sequence of units at 400-level and 500-level.

Major sequences in other disciplines

For details about major sequences in the disciplines combined with law, refer to the Degree of Bachelor of Arts/Bachelor of Economics/Bachelor of Science with the Degree of Bachelor of Laws in the Degrees and Diplomas Offered section in this Part of the Handbook.

Students wishing to combine studies in law with another sequence of study leading to other professional qualifications, (for example, in science, accounting or business administration), may have to take additional units involving more credit points than might be required for other

combined law degrees. Advice should be sought from the relevant Department on professional requirements.

Prerequisites and restrictions on entry to units

Students are required to attain a satisfactory level of achievement to progress through the prescribed sequence of units. For progress in the LLB the Pass Conceded grade (PC) is not considered a satisfactory completion of designated compulsory units. Students in such units will be required to repeat them and to attain at least the grade of P before progress to higher level units is permitted.

Several senior elective units have a restricted entry such as the Macquarie Law Journal and the Jessup International Law Moot. Entry to the Research Projects is also restricted: students who wish to undertake a Research Project must have a GPA in LAW units of 3.25.

Full-time or part-time?

All students accepted for a Combined Law program must enrol as full-time students for a minimum of 18 credit points each year unless they can satisfy the Dean of the Division that there are special reasons of proven financial or other hardship which justify part-time enrolment. In considering cases, which will be treated individually, the Dean of Division will use the following guidelines:

Where the student is enrolled for only one half-year, the Dean of the Division of Law may approve part-time enrolment for the year where the student enrolls for at least 9 credit points; and

In cases of illness, unavoidable disruption to studies or proven financial or other hardship, the Dean of the Division of Law may approve the student's enrolment in less than 9 credit points in any half-year or less than 18 credit points in any academic year, provided that such permission would not normally be given in respect of more than two consecutive half-years.

Students who find at the end of their program that they require fewer than 18 credit points to complete that program may enrol for the number of credit points they still require.

Entry requirements

Applicants must have qualified for matriculation or for special or provisional matriculation. Students wishing to enrol in one of the Combined Law programs or the Distance Law course must also be selected for enrolment in that course. Students enrolled in other courses may choose to take individual units provided by the Division of Law, subject to the permission of the Dean of Division, or any restriction or prerequisite which may be imposed for that year on enrolment in a particular unit.

In 2005 entry to these programs will be limited, and students will be selected on merit. In addition to the places available to school leavers, some places are available to students already enrolled at this University or at other tertiary institutions as non-school leavers.

Applicants who have not attended a tertiary institution are considered for enrolment on the basis of their Tertiary

Entrance Rank (TER) or Universities Admissions Index (UAI) equivalent. Applicants who have attended a tertiary institution will have their whole academic record taken into account.

Transfer from another university

Applicants who have completed units at another institution may apply for and obtain exemptions towards a combined degree. Although graduates may apply for admission, they will be required to complete the combined course, subject to such advanced standing as may be granted. Since the maximum credit for previous studies for graduates of other institutions is 28 credit points, and because of prerequisites for 100-level, 200-level and 300-level law units, these students would require at least three and a half years of full-time study to complete the course.

Transfer within Macquarie

A small quota of places is set aside for students who are currently enrolled at Macquarie University for transfer into the law programs. See below 'Transfer between courses'.

Internal students can enrol only in a Combined Law program. However, a student who has completed the requirements for a degree outside of law may be awarded that degree and, upon subsequent completion of the remaining requirements of the combined program, be awarded the LLB separately.

Professional accreditation

Persons wishing to practise in New South Wales must satisfy the requirements for admission to the Supreme Court as a legal practitioner.

To qualify as a legal practitioner an applicant must either obtain an accredited degree in law or have completed satisfactorily the examinations conducted by the Legal Practitioners Admission Board. The Combined Law programs and the Distance LLB from this University have been accredited.

After completion of the accredited law program candidates for admission as a legal practitioner must undertake further practical legal training which is available from a number of institutions.

Academic advice

Students interested in completing Combined Law should be aware that to progress in law programs the Pass Conceded grade is not considered a satisfactory completion of designated compulsory units. Students in such units will be required to repeat them and to attain at least the grade of 'P' before progress to higher level units is permitted.

Transfer between courses

In 2005 a quota of students not enrolled in a Combined Law program may be permitted to enrol in the first-year law units. Students must have completed 18 credit points or more at Macquarie University in a degree program to be eligible to apply. Those students permitted to enrol in

this way, will be eligible for places in Combined Law if they attain at least the grade of 'P' in the first year law units. There are no deferrals on these quota places. Quota students who fail either of the first year units will not be permitted to transfer into Combined Law. Information about such places and an application form may be obtained from the Division of Law in November. The quota may vary from year to year.

Division of Law enquiries

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 Website: www.law.mq.edu.au

LLB by Distance Program

The LLB is a part-time program by distance education for mature-age students, designed to be completed in approximately six years. In each year of study students enrol part-time, although students may be given permission to proceed at a faster rate. A student's past academic performance and the coherency of the proposed increase in the academic workload will be assessed before permission is granted.

After satisfying the requirements for admission to the LLB program, candidates must obtain 74 credit points in law units. The compulsory and optional units are the same as those available to the internal students in the combined program.

Entry into the LLB by Distance Program

The principles of admission to the program are given under the heading "Distance Education Bachelor of Laws Candidates" in the Student Information section in this Part of the Handbook. Selection criteria are listed under the heading "Distance Education Bachelor of Laws" in the Degrees and Diplomas Offered section in this Part of the Handbook, and in the Schedule of Undergraduate Programs.

BLegS Distance Program

There have been no intakes into this program since 1995. For information on the BLegS programs for students still enrolled in the program see Handbooks for 2003 and earlier.

LLB On-Campus Sessions

Students enrolled in Distance LLB must register in the Division of Law. They are required to attend on-campus sessions, usually two days in each half-year for each unit undertaken.

Exemption from attendance at these sessions will be granted only when application is made on grounds of illness or misadventure. Failure to attend an on-campus session associated with a unit will result in the student being excluded from that unit and (save where non-attendance is due to illness or misadventure) a failure being recorded against him or her.

Award of LLB with Honours

There are no separate Honours degree of LLB, but the degree can be awarded to a meritorious candidate with Honours Class I or Class II.

Academic Senate has approved the following criteria to operate for the award of Honours in Law.

In order to obtain honours in the LLB a student must obtain a grade point average (GPA) of 3.0 in all units taken with the prefix LAW, save in exceptional circumstances, and either:

- to gain Honours Class I, must obtain at least 52 credit points at 'A' or 'D' or 'HD' level in units with the prefix LAW, or
- to gain Honours Class II, must obtain a GPA of 3.6 in units with the prefix LAW worth 36 credit points which must include 12 credit points from required law units.

In order to obtain honours in the BLegS, save in exceptional circumstances, a student must obtain a GPA of 3.0 in all units taken in the Division of Law, and either

- to gain Honours Class I must obtain at least 43 credit points at 'A' or 'D' or 'HD' level in units with the prefix LAW, or
- to gain Honours Class II must obtain a GPA of 3.6 in units with the prefix LAW worth 30 credit points which must include a minimum of 10 credit points from required law units.

The Division has initiated changes to the Honours Rules. These will be implemented in 2005 subject to the approval of Academic Senate. Refer to the Division as to the Honours rules at the given time.

DEPARTMENT OF BUSINESS LAW

For information on the Bachelor of Laws program, see the general information above.

The Department teaches law to students enrolled in a range of degrees such as Bachelor of Arts (BA); Bachelor of Applied Finance with the degree of Bachelor of Commerce-Accounting (BAppFin BCom-Accg); Bachelor of Business Administration (BBA); Bachelor of Business Administration with the degree of Bachelor of Arts (BBA BA); Bachelor of Business Administration (International Studies) (BBA (International Studies)); Bachelor of Business Administration with the degree of Bachelor of Commerce (BBA BCom); Bachelor of Business Administration with the degree of Bachelor of Economics (BBA BEC); Bachelor of Business Administration with the degree of Bachelor of Computing and Information Systems (BBA BCIS); Bachelor of Business Administration with the degree of Bachelor of Science (BBA BSc); Bachelor of Commerce (BCom); Bachelor of Commerce – Accounting (BCom – Accg), Bachelor of e-Business (BeBus); Bachelor of Economics (BEC) and Bachelor of Health (BHlth).

Graduates in these areas work in a wide range of occupations such as accounting, marketing and management. The business law units aim to alert and inform prospec-

tive professionals to legal issues arising in commerce and professional accounting practice.

More specific objectives include reinforcing an understanding of the fundamental ideas in the law; focusing on the institutions of the law; developing knowledge of specific rules and principles in certain branches of the law; continuing the development of the basic skills of legal analysis, through the eliciting and application of the law to hypothetical fact situations; developing general skills of research, analysis and written and oral communication in the context of a language based discipline.

The great majority of students taking units in business law do so as part of their education towards a professional career. A specialisation in BUSL250 Business Law, BUSL301 Corporations Law and BUSL320 Revenue Law leads to recognition by the professional accounting bodies when taken as part of the professional accounting sequence. These qualifying units cover basic legal concepts and techniques, commercial law, company law, and revenue law. Other study opportunities are also available, either instead of or in addition to business law study for accounting purposes. These include a business law major.

Programs of Study in Business Law

The following programs satisfy the requirements for the degrees mentioned above

Area of Study	Coherent Studies	Code
Business Law	Business Law	BSL01
	Business Law and Economics	BSL02
	Business Law and Economics	BSL03
	Business Law and Economics	BSL05

Both BUSL201 Law in Australian Society and BUSL250 Business Law are required for these coherent sequences.

Business Law for Professional Accounting

Students must study BUSL250 Business Law in order to study BUSL301 Corporations Law which, in turn, is a prerequisite for BUSL320 Revenue Law.

Business Law for Asian Studies

BUSL377 Students will be given an overview of Japanese trade laws to familiarise them with the Japanese investment environment and related laws. The course will look critically at topics such as the environment of business, foreign exchange laws, company structures, technology, capital and taxation.

BUSL388 China Trade and Investment Law. Students will be given an overview of China laws that are relevant to foreign trade and foreign investment in China and conduct a critical analysis of these laws. The global impact of these laws will also be analysed, along with how the law impacts on Australia.

Business Law for Labour Relations Studies

BUSL333 Human Resources Law is recommended for the Economics sequence in labour studies and is a required unit for the coherent study in labour relations.

Business Law for Financial Management

Although not part of the Financial Management sequence, students could also consider BUSL301 Corporations Law in addition to BUSL250 Business Law.

Business Law for Marketing

Students intending to study BUSL350 Marketing and Management Law in the Economics and Marketing sequence are advised to study a prerequisite unit, BUSL201 Law in Australian Society or BUSL250 Business Law, in the previous year.

Legal Studies in the Secondary School

Students wishing to gain 8 credit points at 200 level or above in relevant law units should seek advice from the Department of Business Law. Generally, it would be advisable to begin by studying both BUSL201 Law in Australian Society and BUSL250 Business Law in the same year of study, then BUSL315 Business Litigation.

Majors and coherent studies

Business Law Major

A minimum of six units must be studied in order to meet the requirements for a Bachelor of Arts degree. None of the Business Law units are offered to first year students.

The following units are compulsory:

BUSL201; BUSL250

And any 4 other 300 level which you may choose from:

BUSL301; BUSL315; BUSL320; BUSL333; BUSL350; BUSL377; BUSL388

Please note: the Business Law major which commenced in 1997 replaced the previously offered major.

Programs and Units

Approved programs of undergraduate study (majors and coherent studies) are listed in the section of this Handbook entitled "Schedule of Undergraduate Programs". The units of undergraduate study are listed in the "Schedule of Undergraduate Units", and brief descriptions are given in the section entitled "Descriptions of Undergraduate Units".

Department of Business Law enquiries

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Division of Linguistics and Psychology

The Division consists of two large departments, Linguistics and Psychology, with the National Centre for English Language Teaching and Research (NCELTR) being closely associated with Linguistics, and the Macquarie Centre for Cognitive Science (MACCS), an Australian Research Council funded special research centre, being associated with both Departments.

The mission of the Division is to provide effective and innovative teaching and learning, nationally and internationally, in the disciplines of linguistics and psychology based on leading research in each of these areas.

Statements concerning the general skills component of units taught in the Division's courses are included in individual unit outlines. Generic skills include:

- Written and oral communication
- Skills in analysis evaluation and critical thinking
- Information technology
- Ability to work in a group
- Intercultural sensitivity
- Self-awareness skills
- Research design and statistical knowledge
- Problem solving and time management.

Areas of Study

Programs in the following Areas of Study are offered by departments in this Division:

Area of Study	Award	Department
Linguistics	BA, BSc, BSocSc	Linguistics
Psychology	BA, BSc, BA-Psych, BSc-Psych, BPsych (Hons), GDipPsych, BA-Psych LLB, BA-Psych BHLth, BSc-Psych BHLth, BBA BA-Psych	Psychology
Speech and Hearing Science	BSpHearingSc	Linguistics

Degrees Offered

The Departments of Linguistics and Psychology offer the following awards:

Linguistics

Bachelor of Arts
 Bachelor of Science
 Bachelor of Social Science
 Bachelor of Speech and Hearing Science

Psychology

Bachelor of Arts
 Bachelor of Social Science
 Bachelor of Science
 Bachelor of Arts – Psychology
 Bachelor of Science – Psychology
 Bachelor of Arts – Psychology (Honours)
 Bachelor of Science – Psychology (Honours)
 Bachelor of Psychology (Honours)

Bachelor of Arts – Psychology/Bachelor of Health
 Bachelor of Science – Psychology/Bachelor of Health
 Bachelor of Arts – Psychology/Bachelor of Laws
 Bachelor of Arts – Psychology/Diploma in Education
 Bachelor of Business Administration/Bachelor of Arts – Psychology
 Bachelor of Medical Sciences (Psychomedical strand)
 Graduate Diploma in Psychology

Transfer between courses

Any student wishing to change to another degree must meet the requirements set out in Part 1 of this Handbook, and a *Request to Transfer Degree Course* form must be completed.

Programs and Units

Approved programs of undergraduate study (majors and coherent studies) are listed in the section of this Handbook entitled “Schedule of Undergraduate Programs”. The units of undergraduate study are listed in the “Schedule of Undergraduate Units”, and brief descriptions are given in the section entitled “Descriptions of Undergraduate Units”.

Division of Linguistics and Psychology enquiries

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DEPARTMENT OF LINGUISTICS

Studies in the Department of Linguistics cover the full range of language inquiry, its structure, systems, contexts of use, and applications. The Department offers programs with majors in phonetics; audiology and speech and language disorders; systemic-functional grammar; socio-linguistics; computational linguistics; and natural language processing.

The units of study in linguistics are concerned with both the study of language and its various uses and applications in society. Units above 100 level are designed to meet the needs of students of many varying interests including: the theories of language; the study of particular languages; the teaching of English or of English as a second language, or of other languages; the development of language in children; communication disorders and the practice of the language therapies such as speech therapy and audiology; communication and the mass media; the place of speech and language in individual and social behaviour in such fields as psychology, anthropology, sociology, education and philosophy. These units can be combined in various ways, and they can provide a large variety of programs of study in conjunction with other disciplines in the University. Advice on these is given below under the heading Programs of Study in Linguistics. Further information and advice may be

found in the handbook *Exploring Language in Linguistics*, available from the Linguistics Office.

The following foundation studies in first year linguistics (100 level) are recommended:

LING120 and LING110 for Education students, especially BA/DipEd (primary) and BA/DipEd (secondary – English).

LING109 and/or LING120 for Cultural Studies, Media and Law students.

SLP148 and LING110 for Computing and Philosophy students with an interest in computer-generated language issues.

Interdisciplinary studies

Linguistics and psychology, linguistics and education, and linguistics and computing – all in several different combinations – are amongst the most obvious possibilities for interdisciplinary study within linguistics. Others include anthropology, cultural studies, English literature, media studies, sociology, modern languages and philosophy. Students considering a joint program should consult staff in the relevant Departments.

Bachelor of Arts, Bachelor of Social Science, Bachelor of Science

The BA or BSc with a coherent study in linguistics is not a specifically vocational degree. However, with a careful selection of units you may put together a bachelor degree program that will equip you well for entry into certain careers. For some careers, an appropriate Masters degree or postgraduate diploma or postgraduate certificate will be needed for accreditation (see under Professional accreditation).

The Bachelor of Social Science is also a generic degree but does have some vocational directions. For instance, a Bachelor of Social Science with a coherency in sociolinguistics together with the degree requirements for some study in each of the four core areas (Social Theory, Social Science Research Methods, Social Structure, Applied and Policy Studies) makes graduates of this degree attractive to employers recruiting specifically for positions involving social research and/or policy development within government departments, non-government and community organisations and organisations in the private sector involved in language policy planning and multicultural issues.

The minimum requirements for graduation are set out in the “Schedule of Undergraduate Programs” in this Handbook which list, among other things, at least 18 credit points above 200 level, including an approved major or coherent study.

Majors and coherent studies

The following programs satisfy the requirements for these degrees and are currently offered by this Department.

Area of Study	Coherent Studies	Code
Linguistics	Linguistics	LNG01
	Linguistics and Cognitive Psychology	LNG02
	Language and Communication	LNG03
	Linguistics and Special Education	LNG04
	Language and Speech	LNG05
	Grammar and Social Meaning	LNG07
	Linguistics and Intercultural Communication	LNG08
	Linguistics and Policy	LNG09
	Linguistics and Social Psychology	LNG10
	Linguistics and ESL	LNG11
	Linguistics and Social Psychology	LNG12
	Linguistics and Cognitive Psychology	LNG13
	Linguistics and Computing	LNG14
	Sociolinguistics	LNG15

For coherent studies in the Bachelor of Speech and Hearing Science please see below.

Professional accreditation

Careers in language development, speech disorders and audiology can be facilitated through undergraduate studies in linguistics and psychology (LNG02 and LNG13). A clinical masters degree in psychology, speech pathology or audiology, such as those currently offered by Macquarie University (see the Macquarie University Handbook of Postgraduate Studies) would be needed for professional accreditation.

Careers in teaching English as a second language (children and/or adults) can be supported by undergraduate studies in linguistics and education (LNG11). A postgraduate qualification (diploma/certificate) in TESOL can be obtained from Macquarie University for teaching ESL to adults. Those intending to teach ESL in the NSW school system, either primary or secondary, should consult an academic adviser in the Education Division, Australian Centre for Educational Studies.

Careers in editing and publishing can be supported by undergraduate studies in linguistics and media. Undergraduate units in English language (from Linguistics) and writing/print journalism (from Media) are useful preparation, in combination with other undergraduate specialisations of any kind. A postgraduate qualification such as Macquarie University’s diploma/certificate in editing and publishing provides professional training in the field.

Honours program

Students contemplating an honours program should consult with the Head of the Department as early as possible. The requirements for admission to the Honours Degree of Bachelor of Arts are given under the Bachelor Degree

Rules listed at the beginning of this Part of the Handbook.

To gain entry to the honours program in linguistics students are required to have at least 26 credit points in any combination of LING and SPH units, with a relevant grade point average (see information about Honours Degrees in *Degrees and Diplomas Offered* in this Handbook). Students who wish to take the honours units in linguistics without having met these requirements should consult the Head of the Department of Linguistics.

Candidates for honours are required to take three seminar units: LING400 Seminar on Research Method and Design; LING401 Honours Reading Course and LING402 Honours Seminar in Modern Linguistics; together with LING493 Linguistics Investigation and Thesis.

Further information about the honours program is available from the Department Office.

Bachelor of Speech and Hearing Sciences

The fields of speech and hearing sciences are multi-disciplinary areas of study encompassing a large number of traditional disciplines including linguistics, psychology, the medical and clinical sciences, biology, physics, computer science and engineering. Career options in these fields can include developing new speech technologies (for example, computer generation of speech and speech recognition) from either a speech science perspective (linguistic, acoustic, etc) or an engineering or computer science perspective or using technology to simulate human vocal and/or cognitive behaviour. Successful practitioners in the fields of speech and hearing sciences, whether scientists or clinicians, need to be equipped with tools, methods and knowledge from diverse sources. The aim of this degree is to provide students with the range of skills that they will require in their various professional careers.

The Bachelor of Speech and Hearing Sciences consists of a number of core units covering introductory studies in psychology and linguistics, together with, at the minimum, some basic studies in each of statistics and biology. There are four major areas of study. They are audiology, speech and language pathology, cognitive psychology and speech research. All students will take a number of core units in second and third year that are considered areas of basic common knowledge for all four areas of study. Students will also take a number of additional units that are compulsory in their area of specialisation. Beyond the core and compulsory units there is some scope for supporting studies either in one or more of the other three areas of study or in some other science area such as biology, computing, or electronics.

Majors and coherent studies

The following programs satisfy the requirements for these degrees and are currently offered by this Department.

Area of Study	Coherent Studies	Code
Speech and Hearing Science	Audiology	SPH01
Speech and Hearing Science	Cognitive Psychology	SPH02
Speech and Hearing Science	Speech and Language Pathology	SPH03
Speech and Hearing Science	Speech Research	SPH04

Professional accreditation

Audiologists must undertake further postgraduate studies to qualify as a clinical practitioner. Speech and language pathologists must undertake further postgraduate or undergraduate studies to qualify as a clinical practitioner. Cognitive psychology majors who wish to qualify for honours in Psychology must meet the requirements for the BA/BSc(Hons) in Psychology.

Speech Research graduates may wish to undertake further postgraduate studies in Speech Science to better enable them to take up career opportunities in the expanding field of speech and language technology.

Honours program

A fourth honours year can be taken in any of the four major studies areas. For admission requirements for Honours in the Bachelor of Speech and Hearing Sciences see information about Honours *Degrees in Degrees and Diplomas Offered* in this handbook. Students who wish to take the honours units without having met these requirements should consult the Head of the Department of Linguistics.

Academic advice

For further information please consult with an academic adviser in the Speech and Hearing Sciences area of Linguistics, and/or access the Bachelor of Speech and Hearing Sciences degree program website via the Linguistics Department homepage at www.ling.mq.edu.au.

Programs and Units

Approved programs of undergraduate study (majors and coherent studies) are listed in the section of this Handbook entitled “Schedule of Undergraduate Programs”. The units of undergraduate study are listed in the “Schedule of Undergraduate Units”, and brief descriptions are given in the section entitled “Descriptions of Undergraduate Units”.

Department of Linguistics enquiries

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DEPARTMENT OF PSYCHOLOGY

It is natural to assume that someone who is trained in psychology will become a “psychologist”, but it is also important to recognise that qualifications in psychology are useful for a great variety of jobs, particularly as it includes training in research methods and evaluation. Psychology graduates often work for government departments, both Federal and State, especially as vocational and educational counsellors or clinical psychologists; but the fields of community psychology, Health Department work, industrial and commercial employment are also growing.

Many psychologists are engaged in research, both in universities and in government departments. The special training in research techniques which psychologists receive equips them well to work as research consultants in many areas of human relations and work efficiency. For those with strong biological interests special fields of research include physiological psychology, animal behaviour and its relevance to the science of human behaviour and development and psychopharmacology (the study of the effects of drugs on behaviour).

Professional accreditation

The basic requirement for becoming registered as a psychologist in New South Wales is a four-year university degree in psychology plus two years of supervised experience or a two-year postgraduate degree. For admission to membership of the Australian Psychological Society (APS), four years of academic training in psychology plus a two-year postgraduate degree is required. The undergraduate and postgraduate courses offered at Macquarie provide the academic training for qualification as a professional psychologist.

Bachelor of Arts, Bachelor of Social Science, Bachelor of Science

The minimum requirements for graduation in these degrees are set out in the Schedule of Undergraduate Programs and include at least 18 credit points above 200 level, including an approved major or coherent study.

Majors and coherent studies

The following programs satisfy the requirements for these degrees, and are currently offered by this Department.

Area of Study	Coherent Studies	Code
Psychology	Psychology	PSY01
	Social/Developmental Psychology	PSY02
	Psychology	PSY03
	Psychology and Biology	PSY04
	Psychology and Linguistics	PSY05
	Psychology and Philosophy	PSY06

Bachelor of Arts-Psychology/Bachelor of Science-Psychology [APS Accredited Degrees]

Majors and coherent studies

The following programs satisfy the requirements for these degrees, and are currently offered by this Department.

Area of Study	Study Patterns	Code
Psychology	Psychology	PSYC02
	Psychology	PSYC04
	Psychology and Philosophy	PSYC01
	Psychology and Philosophy	PSYC03
	Philosophy	

Honours Program

Entry to the fourth (honours) year requires the completion of the BA-Psychology or BSc-Psychology degree with two additional compulsory units, PSY232 Research Methods in Psychology and PSY331 Design and Statistics III; and at least 16 credit points of 300-level psychology. (Note that a minimum of 18 credit points at 300-level is required to graduate.)

Entry is competitive based on an overall grade point average of 2.5 in at least 68 credit points and a grade point average over all 300-level units of not less than 3.25.

Academic advice

The fourth-year program can only be commenced at the beginning of first semester and requires one year of full-time study or two years of part-time. It is not available by distance education. The program consists of 24 credit points made of the following: empirical thesis; two compulsory units (Research Design IV and Ethical, Conceptual and Professional Issues); and two elective units.

Honours enquiries:

Room: C3A326
 Phone: +61 2 9850 8113
 Email: jenger@psy.mq.edu.au
 Website: www.psy.mq.edu.au

Bachelor of Psychology (Hons) [APS Accredited Degree]

The Bachelor of Psychology (Hons) is a four-year honours degree approved by the APS which leads to associate membership of the APS and provisional registration as a psychologist by the New South Wales Registration Board.

Majors and coherent studies

The following program satisfies the requirements for this degree, and is currently offered by this Department.

Area of Study	Study Pattern	Code
Psychology	Psychology	PSYC05

Entry requirements

An initial group of students is admitted into the BPsych(Hons) degree in the first year based upon their UAI. In 2004 the UAI cut off for entry into the degree was 95.05.

A further pool of places is available at the end of the student's third year of full-time study (or part-time equivalent) if they have met the requirements. Entry is competitive, based on the completion of six compulsory units at 200 level; 24 credit points at 300 level (including two compulsory units); a GPA of 3.25 in 300-level psychology units; and an overall GPA of 2.5 in at least 72 credit points.

Students who are enrolled in the BPsych(Hons) and fail to meet the requirements to enter 4th year, will be required to take out a BA-Psychology or a BSc-Psychology.

The fourth year of the degree can only be commenced at the beginning of first semester and requires one year of full-time study or two years of part-time. It is not available by distance education.

Graduate Diploma in Psychology

This two-year, part-time Diploma of 28 credit points is designed for students who have a recognised degree but only the first year of a major in psychology, (for example, a BA including PSYC1001 and PSYC1002 from the University of Sydney; or a BA including PSY104, PSY105, and STAT170 from Macquarie University). Students with a degree who have not completed first-year psychology will need to complete appropriate non-award units in psychology and statistics before they are eligible to enrol in the Diploma.

Majors and coherent studies

The program consists of the following units:

PSY222; PSY234; PSY235; PSY236; PSY237; PSY332

PLUS additional credit points in 300-level psychology units to make a total of 12 credit points.

Academic advice

Students intending to apply to enter the Honours year should familiarise themselves with the requirements for this. In particular, notice that PSY232 and PSY331 are needed in addition to the units listed.

Some students prefer to do a second Bachelor degree rather than the Graduate Diploma. Note that graduates of an Australian university may be granted credit of 28 credit points, including 10 credit points at 200 level. Thus they require successful study of only 40 more credit points to satisfy requirements for a Bachelor degree.

Graduate Diploma in Psychology enquiries:

For further information and academic advice, telephone (02) 9850 8113. For application forms and administrative queries, telephone (02) 9850 7317.

Interdisciplinary Programs

Bachelor of Arts – Psychology/Bachelor of Health

Bachelor of Science – Psychology/Bachelor of Health

This four year double degree includes a major in psychology accredited by the Australian Psychological Society and also meets the requirements for the Bachelor of Health. It is your preference as to whether you take the BA-Psychology or the BSc-Psychology — they are equivalent. The program will equip students with the skills and knowledge needed in a variety of health-related occupations — eg in health promotion, policy, planning and research. A separate honours year in psychology is available provided that honours requirements are met.

See the entry for the Division of Environmental and Life Sciences in this Part of the Handbook.

Majors and coherent studies

The following programs satisfy the requirements for these degrees, and are currently offered by this Department.

Area of study	Study Pattern	Code
Psychology	Psychology and Health (Arts)	PSYC06
	Psychology and Health (Science)	PSYC07

Bachelor of Arts – Psychology/Bachelor of Laws

This five-year double degree includes a major in psychology accredited by the Australian Psychological Society as well as an approved law degree. The program consists of all of the compulsory units in the BA-Psychology degree plus all of the law units required to complete a LLB.

See the entry for the Division of Law in this Part of the Handbook

Majors and coherent studies

The following program satisfies the requirements for this degree, and is currently offered by this Department.

Area of study	Study Pattern	Code
Psychology	Psychology and Law	PSYL01

Bachelor of Arts – Psychology/Diploma in Education

This is a four-year degree that includes a major in psychology accredited by the Australian Psychological Society as well as meeting the requirements for the Diploma in Education. The program is suitable for teachers wishing to teach at primary school level. A separate honours year in psychology is available provided that honours requirements are met. The program of study is identical to the BA-Psychology and includes the educa-

tion and professional units required for primary teacher training.

See the entry for the Australian Centre for Educational Studies in this Part of the Handbook.

Bachelor of Business Administration

The Bachelor of Business Administration (BBA) is an interdisciplinary degree that includes units in accounting, business law, economics, information systems, marketing and organisational psychology. See Study Pattern BUSN014 for details on the Organisational Psychology strand of the BBA, and note that admission to the 300-level psychology units requires a pass (at P Grade or above) in PSY104 and PSY105.

See the entry for the Division of Economic and Financial Studies in this Part of the Handbook.

Bachelor of Business Administration/Bachelor of Arts – Psychology

The BBA/BA–Psychology double-degree program provides a joint qualification in business and psychology, with the possibility of proceeding to the honours program in either business or psychology. The BBA component is exactly the same as that leading to the straight BBA except that students must take the Organisational Psychology strand. The psychology component consists of all of the psychology units in the BA–Psychology degree. Students wanting to do Honours in Psychology must also take PSY232 and PSY331.

Majors and coherent studies

The following program satisfies the requirements for this degree, and is currently offered by this Department.

Area of study	Study Pattern	Code
Business Administration	Business Administration and Psychology	BUSN06

Bachelor of Medical Sciences

A Bachelor of Medical Sciences meets the demand for well-trained medical and health professionals. The degree is designed to equip graduates with a flexible range of skills for a number of health-related occupations in the medical sciences, in medical research, and in allied health care areas. Graduates might work in hospitals, in medical research laboratories and institutes, in psychological research, or go on to higher degrees. The degree will also provide excellent preparation for entry to post-graduate medical degrees.

Students complete a common first year and then have the choice of specialising in one of three strands: biology, medical chemistry or psychomedical.

See Coherent Studies MED03 for details on the Psychomedical strand.

Entry requirements

Entry to the degree is restricted. Students must have obtained superior HSC grades and are expected to have

achieved Mathematics (Band 2) plus Chemistry (Band 3).

For entry into Psychology honours, students need to complete PSY232, PSY235, PSY331 and PSY332 in addition to the prescribed units. For information on the Psychology Honours course, see Bachelor of Arts–Psychology (Hons)/Bachelor of Science–Psychology (Hons).

Bachelor of Speech and Hearing Sciences

The fields of speech and hearing sciences are multidisciplinary areas of study encompassing a large number of traditional disciplines including linguistics, psychology, the medical and clinical sciences, biology, physics, computer science and engineering. The Bachelor of Speech and Hearing Sciences is an interdisciplinary degree.

See the entry for the Department of Linguistics, above.

Majors and coherent studies

The following program satisfies the requirements for this degree, and is currently offered by this Department.

Area of study	Coherent Study	Code
Speech and Hearing Science	Cognitive Psychology	SPH02

Programs and Units

Approved programs of undergraduate study (majors and coherent studies) are listed in the section of this Handbook entitled “Schedule of Undergraduate Programs”. The units of undergraduate study are listed in the “Schedule of Undergraduate Units”, and brief descriptions are given in the section entitled “Descriptions of Undergraduate Units”.

Department of Psychology enquiries

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Division of Society, Culture, Media and Philosophy

The Division of Society, Culture, Media and Philosophy includes the Departments of Anthropology, Critical and Cultural Studies, Media, Philosophy, Sociology, Warawara — Department of Indigenous Studies, the Institute for Women’s Studies and the Macquarie University Centre for International Communication. Undergraduate students studying for any degree program can enrol in the Division’s units, but SCMP students are mostly completing degrees in Arts, Creative Arts, Media and Social Sciences. The Division adopts a contemporary interdisciplinary approach to the study of human society, culture and ideas in a variety of contexts. How are meanings, values and identities made in the postmodern world? How do they interact with social structures, media technologies and cultural practices? What critical and analytical processes — both contemporary and traditional — can be used to explain, ground and develop our knowledge of the world? These issues, combined with the latest research, fuel the wide-ranging undergraduate offerings of the Division. Students become acquainted with contemporary approaches to how human beings communicate, structure their relationships and develop ideas, and learn important skills in research, analysis and critique. Graduates have a wide and diverse variety of career options including media production, journalism, research, education, marketing, advertising, public relations, community organisations, cultural heritage, creative arts and arts administration, performance, creative writing, health management, gender and EEO management, public administration, diplomacy, ethics and human rights, Aboriginal and ethnic affairs, social and economic development, international aid program delivery, and international communications.

Areas of Study

Programs in the following Areas of Study are offered by departments in this Division.

Area of Study	Award	Department
Anthropology	BA, BSocSc	Anthropology
Creative Arts	BCreative Arts BCreative Arts (International)	Division of Society, Culture, Media and Philosophy
Cultural Studies	BA, BA in Media & Cultural Studies Studies	Critical & Cultural
Indigenous Studies	BA, BSocSc BSc	Warawara
International Communication	BIntCom	Centre for International

Media Studies	BA BA in Media & Cultural Studies BIntCom BMedia BMediaLLB	Communi- -cation Media
Philosophy Social Science	BA, BSocSc BA BSocSc	Philosophy Social Sciences Committee Sociology
Sociology	BA BSocSc	Sociology
Women’s Studies	BA BSocSc	Women’s Studies

Degrees Offered

The following awards are offered by this Division and its departments:

- Bachelor of Arts
- Bachelor of Arts (Honours)
- Bachelor of Creative Arts
- Bachelor of Creative Arts (Honours)
- Bachelor of Creative Arts (International)
- Bachelor of Creative Arts (International) (Honours)
- Bachelor in International Communication
- Bachelor of Media
- Bachelor of Media (Honours)
- Bachelor of Social Science
- Bachelor of Social Science (Honours)
- Graduate Diploma in Anthropology
- Graduate Diploma in Gender Studies
- Graduate Diploma in Philosophy
- Graduate Diploma in Women’s Studies

Transfer between courses

Any student wishing to change his or her degree to another degree must meet the requirements set out in Part 1 of this Handbook, and a Request to Transfer Degree Course form must be completed.

Division of Society, Culture, Media and Philosophy enquiries

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 Website: www.scmp.mq.edu.au

Bachelor of Creative Arts

The Bachelor of Creative Arts (BCA) is a multi-disciplinary degree designed for those seeking employment in the arts and associated organisations or public services, especially those who plan a career involving arts administration. The program adopts a wide definition of the arts and addresses the needs of workers including theatre, film, publishing, galleries, museums, funding organisations, regional arts centre and educational institutions. Students will complete a major study in arts, specifically

creative writing, drama and performance, visual art and multimedia or music.

It is expected that BCA graduates will possess in-depth knowledge of at least one arts area; vocational orientation in the arts; working knowledge of galleries, museums, the collation of materials and the way galleries function; human resource management and sound knowledge of business principles and practice; knowledge of copyright law and intellectual property; access to and working knowledge of communications technology (including the Internet, the Web, CD-ROM, CDI, DVD); ability to conduct research in the arts, handle publicity and media inquiries, and liaise with arts-related organisations, funding bodies and industry; capacity to work in arts projects in arts centres, schools and the community.

To fulfil the requirements for the Bachelor of Creative Arts, a student must complete at least 72 credit points, including such units as are prescribed for the Degree; at least 42 credit points in units above 100 level; at least 18 credit points in units above 200 level; and these 18 credit points must include a coherent study from those approved for this Degree.

Majors and coherent studies

The following programs satisfy the requirements for this degree, and are currently offered.

Area of Study	Coherent Studies	Code
Creative Arts	Music	CRE01
	Drama and Performance	CRE02
	Creative Writing	CRE03
	Visual Arts and	CRE04
	Multimedia	

Bachelor of Creative Arts (International)

Students in the Bachelor of Creative Arts (International) do an international, university funded work placement in the third year of the degree.

Majors and coherent studies

The following programs satisfy the requirements for this degree, and are currently offered

Area of Study	Coherent Studies	Code
Creative Arts	Music	CRE05
	Drama and Performance	CRE06
	Creative Writing	CRE07
	Visual Arts and	CRE08
	Multimedia	

Honours program

An Honours program may be undertaken in the BCA and the BCA (International) with the Department responsible for students' coherent study providing appropriate supervision.

Transfer between courses

Any student wishing to change his or her degree to another degree must meet the requirements set out in Part 1 of

this Handbook, and a Request to Transfer Degree Course form must be completed.

Bachelor of Creative Arts enquiries

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 Fax: +61 2 9850 8240
 Email: mark.evans@mq.edu.au
 Website: <http://www.mq.edu.au/BCA>

Bachelor of Social Science

The degree of Bachelor of Social Science (BSocSc) is an interdisciplinary degree that requires three years of full-time study (longer for part-time students). It is designed to give students a good grounding in the social sciences. It focuses on social research and the applications of social science to public policy. The fields of study in which students may complete a coherent study for the BSocSc are listed in the Schedule of Programs of Study. In addition a limited number of units in the following discipline-based coherent studies are designated as "social science": law, philosophy and psychology. The flexible structure of the BSocSc allows students to develop programs made up of units selected from a wide range of social sciences and also to include other fields of study, provided the minimum requirements of the degree are met. Some units designated as approved social science units are also available in flexible modes of offering.

To qualify for the award of the degree of Bachelor of Social Science a student must meet the requirements of Rule 37 of the Bachelor Degree Rules. A student must complete 68 credit points including at least 38 credit points in units at 200 level or above; at least one unit at 200 level or above from each of four groups of units set out below; and at least 18 credit points in units at 300 level or above designated in the Schedule of Undergraduate Units as social science units. These 18 credit points must include a coherent study approved for this degree.

It is strongly recommended that the degree program includes at least 15 credit points at 100 level in social science units spread across a range of subject areas.

Majors and coherent studies

The following programs satisfy the requirements for this degree, and are currently offered

Area of Study	Coherent Studies	Code	
Discipline Based			
Anthropology	Anthropology	ANT03	
Demography	Demography	DEM05	
Human Geography	Human Geography	HGE04	
Law	Law	LAW03	
Linguistics	Linguistics – Intercultural Communication	LNG08	
	Linguistics – Policy	LNG09	
	Linguistics – Social Psychology	LNG10	
	Modern History	Modern History	MDH03
	Philosophy	Social Philosophy	PHL02

Politics	Politics	PLT03
Psychology	Social/Developmental Psychology	PSY02
Sociology	Sociology	SOC02
Interdisciplinary Studies		
Indigenous Studies	Indigenous Studies	ABR02
	Indigenous Studies and Anthropology/Sociology	ABR03
	Indigenous Studies and History/Politics	ABR04
Population Studies	Population Studies	PPL01
	Population Studies – Economic	PPL02
	Population Studies – Social	PPL03
Women's Studies	Women's Studies	WST03
Other Interdisciplinary Studies		
Social Science	Social Theory	SSC01
	Social Structure	SSC02
	Applied/Policy Studies	SSC03

Entry requirements

Acceptance into the Bachelor of Social Science program.

Academic advice

The four groups of units for the purposes of rule 37 (1)(b)(ii) of the Bachelor Degree Rules are:

Social Theory

ANTH273; ANTH276; ANTH381; CUL200; CUL300; PHIL233; PHIL238; PHIL241; PHIL242; PHIL249; PHIL254; PHIL264; PHIL351; PHIL352; PHIL356; PHIL357; PHIL363; PHIL364; PHIL382; POL264; POL342; PSY361; SOC232; SOC235; SOC379; SOC383; SOC395; WST210; WST310

Social Science Research Methods

ANTH385; DEM356; EDUC406; GEOS264; GEOS347; GEOS371; PHIL232; PHIL256; PSY331; PSY345; SOC234; SOC300; STAT373; STAT395

Social Structure

ABST200; ABST300; ANTH277; ANTH272; ANTH365; ANTH374; ANTH375; ANTH382; ANTH384; DEM255 or DEM355; ECH315; ECH316; ECH326; EDUC333; EDUC358; GEOS215; GEOS219; GEOS262; GEOS280; GEOS311; GEOS316; GEOS324; GEOS330; GEOS351; GEOS363; POL250; POL251; POL270; POL300; POL321; POL380; POL383; POL386; SOC231; SOC244; SOC290; SOC370; SOC381; SOC390; SOC392

Applied and Policy Studies

ANTH274; ANTH275; ANTH377; ANTH380; ANTH387; DEM256; ECH417; EDUC264; GEOS265; GEOS310; GEOS319; PHIL242; PHIL264; PHIL364; POL340; POL341; POL374; SOC233; SOC289; SOC372

Honours program

The Honours Degree of Bachelor of Social Science normally requires one year of full-time study or two years of

part-time day or evening study. It is not available by distance education. Students must have qualified for the Bachelor of Social Science before being admitted to the program, and must have completed satisfactorily a program of study prescribed by the Director of the Bachelor of Social Science in consultation with the discipline (or disciplines) in which they desire to undertake the honours program. Disciplines in which an Honours Degree in Social Science is available are: anthropology, demography, human geography, modern history, politics and sociology. Admission to the honours program is subject to approval after a consideration of the student's level of performance in the program for the Bachelor of Social Science. To be eligible for selection to an honours program a candidate must have obtained an overall grade point average of at least 2.5; and achieved the required 300-level grade point average of 3.0 determined by Academic Senate on the recommendation of the Division concerned in relation to honours programs offered by anthropology, demography, modern history, politics and sociology or the 2.5 grade point average determined by the Academic Senate on the recommendation of the Division concerned in relation to the honours program offered by human geography.

Transfer between courses

Any student wishing to change his or her degree to another degree must meet the requirements set out in Part 1 of this Handbook, and a Request to Transfer Degree Course form must be completed.

Bachelor of Social Science enquiries

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 Website www.mq.edu.au/bsoesc/main.htm

DEPARTMENT OF ANTHROPOLOGY

Anthropology is the study of human culture and society from an integrated perspective, including consideration of systems of cultural meaning, family and kinship, religion and ritual, community and the state, illness and healing, power and economy, communication and symbolism. Anthropology studies the entire range of human societies from small-scale isolated 'tribal' communities to modern industrial urban communities. The perspective is comparative, and considers both universals, the social and cultural attributes which human beings share, and differences, the things that members of human groups use to mark themselves off from one another.

An understanding of anthropology is important for anyone working in areas of cross-cultural significance, for example in teaching, the medical professions, welfare work, counselling, law and the media. People who seek careers in anthropology first take an honours degree, and then go on to a substantial piece of research in Australia or overseas.

Although most anthropological research has in the past been concerned with small-scale societies, attention is increasingly focused on the emerging globalised world and the complex interactions now evident as societies and cultures of all kinds are thrown into novel interconnections.

Anthropologists are employed as university teachers, in museums and other cultural and conservation bodies, as research officers in organisations such as the Northern Land Council and Central Land Council, by Commonwealth and State Departments of Health, Ethnic Affairs and Aboriginal Affairs, by the Australian Development Assistance Bureau and as advisers in a wide range of programs in Third World countries. Some anthropologists are established as independent consultants, working on a variety of programs for government and private industry.

Distance Education Program

Students may enroll externally in ANTH106 Drugs Across Cultures.

Bachelor of Arts

The degree of Bachelor of Arts has a flexible structure which allows students to develop programs made up of units selected from a wide range in the Social Sciences and Humanities.

Majors and coherent studies

The following programs satisfy the requirements for this degree, and are currently offered by this Department.

Area of Study	Coherent Studies	Code
Anthropology	Anthropology	ANT01
	Anthropology	ANT03

Theoretical Studies

ANTH273; ANTH276; ANTH381

Anthropology of Health and Medicine

ANTH106; ANTH274

Anthropology of Power and Politics

ANTH275; ANTH272; ANTH273; ANTH361; ANTH380; ANTH387

Applied Anthropology and Development Studies

ANTH275; ANTH272; ANTH374; ANTH380; ANTH385

Cultural Anthropology

ANTH276; ANTH277; ANTH272; ANTH360; ANTH365; ANTH375; ANTH381; ANTH382

Performance/Aesthetics Studies

ANTH276; ANTH277

Local Knowledge and Ethnography

ANTH375; ANTH379

Entry requirements

There are no special entry requirements to study Anthropology.

Academic advice

Students are advised to consult with staff members during the enrolment period concerning their programs of study.

Honours program

Students with a strong undergraduate record are encouraged to undertake the honours degree. This requires an additional year of study (full-time) or two years (part-time). Students seeking to undertake honours should have obtained 24 credit points in anthropology with an overall "B" (High Credit and above) grade average. Students who do not fully meet these requirements may in some cases also be given entry, particularly if their 300 level results are strong and if their records include "B" results or better in units in related disciplines.

Honours candidates are assessed on the basis of a supervised research paper of approximately 20,000 words, which counts for 80% of the final result, together with an essay of approximately 8,000 words generally on a theoretical topic, counting for the remaining 20%. They are also required to participate in a weekly seminar and to attend anthropology colloquia. Students intending to enroll in honours should consult a staff member well in advance of their honours application, to ensure that supervision will be available in the area of their interest. Such requests should in the first instance be addressed to the Honours Convenor.

Students applying to enter the Honours program from other universities must contact the Honours Convenor well in advance of submitting their applications in order to receive advice as to requirements and supervision.

A document setting out requirements for honours in Anthropology is available from the Administrator, Department of Anthropology, Macquarie University, NSW, 2109.

Graduate Diploma in Anthropology

The Graduate Diploma in Anthropology is offered for those who already have an undergraduate degree, but who are interested in an intensive course composed entirely of anthropology units. This course is also intended for those who wish to enrol in the Master of Anthropology, but who do not have sufficient undergraduate anthropology units to qualify them for admission into the program. Entry is available to students with a Bachelor of Arts or Bachelor of Social Science degree with a concentration in one or more of the following areas of study: sociology, welfare studies, social work, media and cultural studies, politics, philosophy, and human geography; or by permission of the Dean of Division. The Diploma is undertaken over one year full-time, or two years part-time study, during which students must successfully complete a minimum of 23 credit points in anthropology, with at least 12 at 300 level.

Those wishing to use the Graduate Diploma as a means of entry into the Masters program must include the following units:

ANTH273; ANTH275

And at least two of the following:

ANTH272; ANTH374; ANTH377; ANTH380; ANTH385; ANTH387

Bachelor of Social Science

See Bachelor of Social Science under the Division of Society, Culture Media and Philosophy in this section of the Handbook.

Programs and Units

Approved programs of undergraduate study (majors and coherent studies) are listed in the section of this Handbook entitled “Schedule of Undergraduate Programs”. The units of undergraduate study are listed in the “Schedule of Undergraduate Units”, and brief descriptions are given in the section entitled “Descriptions of Undergraduate Units”.

Department of Anthropology enquiries

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DEPARTMENT OF CRITICAL AND CULTURAL STUDIES

The units in Critical and Cultural Studies (units with a CUL prefix) are designed to enable students to develop the analytical and creative skills necessary for an understanding of the changing nature of contemporary culture. Units are offered in the broad areas of postmodernism and poststructuralism, sexuality and queer theory, gender and feminist theory, Australian cultural studies and literature, writing, and performance studies. Texts studied are very diverse, including popular and ‘high’ cultural forms (for example, films, popular music, genre fiction) and are placed in a theoretical framework drawn from such fields as recent political theory, psychoanalysis, poststructuralism and feminism. The Department also has a fully-equipped drama studio and students can take units in practical drama at all undergraduate levels, and creative writing may be studied at both 200 level and 300 level. The aim of the Department is to give students a broad and accessible introduction to the most vibrant and important concepts and controversies in the contemporary study of human culture.

The Department aims to provide students with sought-after generic skills as critical thinkers; excellent communication skills (orally, verbally and visually), and for them to become independent and resourceful workers, and team players who are sensitive to cultural differences, are flexible and embrace ambiguity and complexity.

For further information, students are directed to the Department web site at www.ccs.mq.edu.au

Interdisciplinary studies

For those students admitted through the separate UAC code, the Department offers a program in Media and Cultural Studies, mounted in conjunction with the Department of Media. This program combines units from Critical and Cultural Studies with non-production units in Media. These latter units cover such topics as: news and current affairs; film studies; popular culture, popular music and contemporary film; women and the media; and the media and the Pacific.

The Department contributes units in performance, drama and writing to the Creative Arts program. Students with interests in this area may combine CUL units with the units from the other Departments and Divisions.

Bachelor of Arts

This general degree provides maximum flexibility of choice in the Humanities and Social Sciences.

Coherent studies

The following programs satisfy the requirements for this degree, and are currently offered by this Department.

Area of Study	Coherent Study	Code
Media & Cultural Studies	Media & Cultural Studies A	CUL01
	Media & Cultural Studies B	CUL02
Critical & Cultural Studies	Critical & Cultural Studies	CUL03
	Writing & Performance Interdisciplinary Cultural Studies	CUL04
Drama	Drama Studies	CUL06
	Performance Drama	CUL07

Entry Requirements

Candidates wishing to take 200 level units, who have not satisfied the appropriate prerequisites, may, in certain circumstances, be considered for admission upon satisfactory completion of preliminary reading, provided that they have gained at least 18 credit points towards their degree.

Academic Advice

Students intending to major in Cultural Studies are advised to consult with staff members concerning their program of study. A staff member will be available for consultation during the enrolment period.

Bachelor of Arts with Honours in Cultural Studies

The Critical and Cultural Studies Honours Program offers a challenging opportunity for intensive study at a higher level. It is a professionally prestigious extension to an undergraduate degree and a gateway to higher research degrees (such as the MA (Research) and PhD degrees) in Cultural Studies.

The Honours year is taught as a combination of dissertation and coursework units such as *Blood; The Cultivation of Fear; Whiteness: Bodies, Space and Visuality; Writing, Performing and Directing; Culture in a Time of War.*

Graduates of programs in critical and cultural studies may work as writers, researchers, publishers, journalists, public relations consultants, public servants, teachers, academics, policy makers, artists, business consultants, copywriters.

Entry requirements

To be eligible for admission to the Honours program students must have an undergraduate degree with a major in Critical and Cultural Studies, and an overall GPA of 2.5 and a GPA of 3 at 300 level.

Academic advice

Students intending to major in cultural studies are advised to consult with staff members concerning their programs of study. A staff member will be available for consultation during the enrolment period.

Department of Critical and Cultural Studies enquiries

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Website: www.ccs.mq.edu.au

DEPARTMENT OF MEDIA

The University of Macquarie's Department of Media was the first of its kind in Australia. Since its inception, the media program has been continuously updated to ensure its relevance in a constantly changing media landscape. The teaching philosophy of the Department combines the critical and the creative, the theoretical and the practical. Our programs draw on staff with a broad range of academic credentials, technical skills and professional industry experience, including filmmakers, journalists, broadcasters and new media practitioners.

Recognising and fostering the links between research, learning and practice, the Media Department actively creates and pursues opportunities that engage media scholars and practitioners, other media stakeholders and the wider community.

Bachelor of Media

The Bachelor of Media degree addresses media history, theory and practice over three years of full time study (longer for part-time study). The degree is structured around core units of media studies and production at 100, 200 and 300 levels.

The first year of study includes a common core of media theory units focusing on Australian and international media. At 200 level, students begin to specialise in particular production stream – Writing, Visual Media Production or Multimedia. It is important to note that

these are variations of study within the Bachelor of Media program and that the name of the coherent study is not part of the title of the award.

At all levels, students are encouraged to supplement their media studies with elective units reflecting complementary fields of study and their own interests. This may include units offered within the Division of Society, Culture, Media and Philosophy, or elsewhere in the University.

The three-year Bachelor of Media in Writing focuses on writing for print media. First year studies cover a diverse range of media, culture and other subjects. Throughout the second and third years of the degree, students undertake four consecutive core writing production units. These are complemented by a broad range of media theory units and elective subjects. The BMedia in Writing program includes a strong theoretical component. Students will take courses in critical media theory, as well as units that analyse the role of print media. Core production units emphasising non-fiction, but also dealing with fiction writing enable students to develop their writing skills through practical exercises, workshops and major writing projects. Throughout the course students aim to produce professional quality work and are encouraged to pursue publishing opportunities.

The Bachelor of Media in Visual Production provides an introduction to single camera digital video production, addressing the processes by which screen productions are developed, produced and distributed. Students are given opportunities to explore the creative process which underpins the relationship between the technical and the conceptual in screen production. Further to this, students develop both their critical and craft skills in the production of short digital video works using high-end digital equipment together with state of the art lighting and camera support systems. The four core visual media production (screen production) units focus progressively on the creative production requirements of a range of screen genres including experimental, drama and documentary works.

The program includes a strong theoretical component. Compulsory courses in media theory and screen studies develop critical and analytical skills that enable students to situate their screen productions within a genuine critical context.

The Bachelor of Media in Multimedia is designed to teach students practical skills within a theoretical context that emphasises thought and discussion directed to creative media outcomes. Students will take courses in critical media and multimedia theory. Current media discourses and debates will be canvassed and new media forms such as the internet will be subject to theoretical analysis. Applied theoretical approaches will focus on 'thinking multimedia', developing problem-solving skills and analysing multimedia approaches.

The degree will provide hands-on production experience in a number of state-of-the-art multimedia tools including Macromedia Dreamweaver, Flash, and Adobe Photoshop. Students will also work with audio and video tools such as Digidesign Protools and Final Cut Pro.

Students will work towards major multimedia productions using our fully-equipped multimedia labs.

Entry requirements

Non HSC – Mature Age Entry – students apply through the Universities Admission Centre. In addition, non-HSC applicants must also provide a portfolio to the Media Department. Application instructions, including portfolio requirements, are available from the Media Department.

Majors and coherent studies

The following programs satisfy the requirements for this degree, and are currently offered by this Department.

Area of Study	Study Patterns	Code
Media	Writing	WRTG02
	Visual Production	VSPR02
	Multimedia	MMED02

Interdisciplinary studies

The Bachelor of Arts in Media & Cultural Studies acknowledges the common study areas of media and cultural production and is administered by the Department of Critical & Cultural Studies.

The combined Media/Law degree enables eligible students to combine five years of legal studies with three years of media theory and production, resulting in them earning a combined degree called BMedia/LLB.

Honours in Media

The Honours Program provides the option of studying Media Theory and/or Media Arts. For this one-year full time program, students complete three equally weighted coursework units and a 12,000–15,000 word thesis. The Media Honours thesis takes three forms: written thesis, video production or screenwriting. Eligible students enroll in the Honours in Media and negotiate their program with the Honours convenor.

Academic advice

Students intending to major in media are advised to consult with staff members concerning their programs of study. A staff member will be available for consultation during the enrolment period.

Programs and Units

Approved programs of undergraduate study (majors and coherent studies) are listed in the section of this Handbook entitled “Schedule of Undergraduate Programs”. The units of undergraduate study are listed in the “Schedule of Undergraduate Units”, and brief descriptions are given in the section entitled “Descriptions of Undergraduate Units”.

Department of Media enquiries

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MACQUARIE UNIVERSITY CENTRE FOR INTERNATIONAL COMMUNICATION

The Macquarie University Centre for International Communication offers the Bachelor in International Communication (BIC).

The Bachelor in International Communication is designed to propel graduates towards careers in the media, public relations, policy, diplomacy and related fields where knowledge of intercultural issues and practical skills in writing and public relations are valuable.

Internationally-minded students will benefit from a balanced program of core units offering practical media and public relations skills and a wide range of electives providing theory and insights across cultures, media and globalisation.

Choices of supporting subjects include units from anthropology, geography, languages, politics, sociology, history, cultural studies, linguistics and philosophy.

Bachelor in International Communication

The degree program is structured around core units of International Communication (ICOM) at 100, 200 and 300-level. Core units include: ICOM 101 Intercultural Relations, ICOM 201 International Television, and ICOM 301 Global Knowledge Society. Overall, a Bachelor in International Communication student has to complete 68 credit points, of which at least 38 credit points must be at 200-level or higher. A minimum of 18 credit points must be at 300-level.

Majors and coherent studies

The following programs satisfy the requirements for this degree, and are currently offered by this Department.

Area of Study	Coherent Studies	Code
International Communications	International Communications	MEDA01

Entry requirements

Entry to ICOM units is restricted to students enrolled in the Bachelor in International Communication, Bachelor in Media, or Bachelor of Arts in Media and Cultural Studies.

Students enrolled in the Bachelor of Media or Bachelor of Arts in Media and Cultural Studies may transfer to the Bachelor of International Communication if they complete 18 credit points; and have a minimum of a credit grade for each of MAS 104, MAS 105 and CUL 100; and, an overall GPA of 3.25.

Academic advice

Students intending to enrol in the Bachelor in International Communication are advised to contact Dr Stephen McElhinney.

Programs and Units

Approved programs of undergraduate study (majors and coherent studies) are listed in the section of this Handbook entitled Schedule of Undergraduate Programs. The units of undergraduate study are listed in the Schedule of Undergraduate Units, and brief descriptions are given in the section entitled Descriptions of Undergraduate Units.

Macquarie University Centre for International Communication enquiries

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DEPARTMENT OF PHILOSOPHY

Philosophy develops invaluable skills in creative thinking, communication and problem-solving. Philosophy does not tell you what to think; it teaches you how to think for yourself. You learn how to reflect on your views, give reasons for them, and to understand and evaluate other positions and arguments.

As a subject, philosophy asks, and seeks to answer, fundamental questions about many areas of human life and intellectual inquiry. These include questions about the relationship between mind and body; the existence of God; the status of moral beliefs and aesthetic judgments; the nature of knowledge; the relationship between the world and our concepts and modes of reasoning. However philosophers are also concerned with contemporary social and political issues, such as euthanasia, gender relations, and indigenous rights.

Because philosophy is such a broad subject, it combines well with a range of other degree programs, including those in psychology, law, the natural sciences, mathematics, computing, anthropology, sociology, media, cultural studies, politics, and history. Philosophy graduates may enter careers in fields as diverse as business, journalism, foreign affairs, politics, the law, medicine, computing, and the arts.

The program in philosophy at Macquarie offers a wide variety of units in different traditions of philosophical thought and technique (both 'analytic' and 'continental').

The four 100-level units provide an introduction to a range of different philosophical issues and techniques:

PHIL131; PHIL132; PHIL134; PHIL137

200 level and 300 level philosophy units fall into three main areas:

Ethics and Ethical Theory

PHIL233; PHIL241; PHIL242; PHIL264/364; PHIL352; PHIL357; PHIL382

Continental and Social Philosophy

PHIL238; PHIL250; PHIL254; PHIL351; PHIL356; PHIL361

Mind, Metaphysics and Meaning

PHIL232; PHIL246; PHIL249; PHIL256; PHIL262; PHIL280; PHIL281; PHIL358; PHIL363

The Department also teaches two units specifically in the history of philosophy: PHIL245 Classical Modern Philosophers and PHIL359 Kant.

100 level units are offered both day and evening; each 200 level and 300 level unit is usually offered in the evening once every three years. Some 200 level and 300 level units are offered in specific rotation patterns. Further information about units and sequences is available from the Philosophy Department.

Interdisciplinary studies

An interdisciplinary program in psychology and philosophy is also available to students enrolled in the BA-Psych or BSc-Psych. For details see the entry under Department of Psychology. An interdisciplinary 100 level unit is co-taught with the Departments of Computing and Linguistics: SLP 148 Language, Logic and Computation.

Bachelor of Arts

This general degree provides maximum flexibility of course choice in the humanities and social sciences.

Majors and coherent studies

The following program satisfies the requirements for this degree, and is currently offered by this Department.

Area of Study	Coherent Studies	Code
Philosophy	Philosophy	PHL01

Entry requirements

Candidates who wish to take 200-level units, but who have not satisfied the appropriate prerequisites, may, in certain cases, be considered for admission upon satisfactory completion of preliminary reading, provided that they have gained at least 18 credit points towards their degree.

Academic advice

Students intending to major in philosophy are advised to consult with staff members concerning their programs of study. A staff member will be available for consultation during the enrolment period.

Bachelor of Social Science

This degree is specifically tailored to the social sciences. Many philosophy units are core units in the BSocSc. See Bachelor of Social Science under the Division of Society, Culture, Media and Philosophy in this Part of the Handbook.

Majors and coherent studies

The following program satisfies the requirements for this degree, and is currently offered by this Department.

Area of Study	Coherent Studies	Code
Philosophy	Social Philosophy	PHL02

Entry requirements

Candidates who wish to take 200-level units, but who have not satisfied the appropriate prerequisites, may, in certain cases, be considered for admission upon satisfactory completion of preliminary reading, provided that they have gained at least 18 credit points towards their degree.

Academic advice

Students intending to major in philosophy are advised to consult with staff members concerning their programs of study. A staff member will be available for consultation during the enrolment period.

Bachelor of Creative Arts

This degree is specifically tailored to the needs of arts practitioners and administrators. See Bachelor of Creative Arts under the Division of Society, Culture, Media and Philosophy in this Part of the Handbook.

Honours program

The Philosophy Honours Program offers an exciting and challenging opportunity for intensive philosophy study at a higher level. It is a professionally prestigious extension to an undergraduate degree and a gateway to higher research degrees (such as the MA (Research) and PhD degrees) in philosophy.

Entry requirements

To be eligible for admission to the Honours program students must have an undergraduate degree with a major in philosophy, and an overall GPA of 2.5 and a GPA of 3 at 300 level. In addition, the Philosophy Department requires honours applicants to have completed 28 credit points in philosophy, of which at least 12 credit points should be at 300 level. However, intending honours students are strongly advised (although not required) to have between 30 and 36 credit points in philosophy. In addition, the Department encourages intending honours students to take a broad range of units in philosophy prior to the honours year. If you are in doubt as to your program, seek advice from a member of the Philosophy Department staff. In special circumstances it may be possible to waive one or other of the above requirements. This is usually a matter of recommendation by the Philosophy Department, and decision by the Undergraduate Studies Committee.

Academic advice

For further information about the Honours program, or for advice on a coherent program of study prior to enrolling in the Honours program, students should consult the Philosophy office, tel: (02) 9850 8837; email: philos@scmp.mq.edu.au

Graduate Diploma in Philosophy

The Graduate Diploma in Philosophy is a degree especially designed for those who already have an undergraduate degree (in any field, from any recognised institution) and who wish to undertake a short, intensive program of study in philosophy, for their own personal interest, to enhance and update their professional skills and expertise, or as a means of acquiring the philosophical background necessary for pursuing further postgraduate work in philosophy. Students who have undertaken the Graduate Diploma in Philosophy in recent years have had undergraduate degrees in areas as diverse as business, engineering, tourism, commerce, accounting, economics, statistics and psychology. The diploma is undertaken over one year of full-time study (or two years part-time). Candidates must obtain an aggregate of at least 24 credit points at 200 level or above in philosophy units, including at least 12 credit points at 300 level. Students may make up those 24 credit points out of the undergraduate philosophy units currently on offer, but those who are undertaking the Diploma as further professional training or as a bridge to postgraduate work in philosophy are strongly advised to consult with a member of the philosophy staff when compiling their program of units. A grade point average of 3.0 in the graduate diploma will qualify students for acceptance into the honours program in philosophy.

Entry requirements

A Bachelor degree in any field of study from Macquarie University or any other accredited tertiary institution.

Programs and Units

Approved programs of undergraduate study (majors and coherent studies) are listed in the section of this Handbook entitled Schedule of Undergraduate Programs. The units of undergraduate study are listed in the Schedule of Undergraduate Units, and brief descriptions are given in the section entitled Descriptions of Undergraduate Units.

Department of Philosophy enquiries

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DEPARTMENT OF SOCIOLOGY

Sociology is the study of the modern social world. It reflects the habitual practice of modern society to subject its own identity and practices to critical scrutiny and reflection.

Typically, sociology challenges our commonsense assumptions about how our society works and our place in it. It asks us to develop an informed and more analytical understanding of our social relations.

By convention, sociology usually focuses on modern industrial and post-industrial societies. It is concerned with understanding such things as: power and inequality in society; the dynamics of social change; the contributions of social movements to social change; shared and contested values; the social features of our individual lives and the experience of particular groups. Sociology concerns itself with such issues as governing society in liberal democracy, the effects of globalisation, the role of media, and the relationship between our social and personal lives.

Interdisciplinary studies

Sociology participates in the Community Management Program with Warawara - Department of Indigenous Studies. This program focuses particularly on developing management based research skills. For more information see the Interdisciplinary Studies section in this Part of the Handbook.

Distance Education Program

The following units can be studied by Distance Education:

SOC 175*; SOC 180*; SOC 234 ; SOC 235*; SOC 372; SOC 379*; SOC 392*

* denotes units also offered through the Open Learning Australia program

Bachelor of Arts

Students do core subjects in sociology at 100 and 200 level, 12 credit points in sociology in the range SOC300-SOC395, plus six credit points at 300 level in sociology or a cognate discipline.

Sociology of Media strand students proceed as above, but do six credit points from 300 level MAS units, excluding MAS312 and MAS313, and including not more than three credit points from MAS310, MAS311, MAS389, MAS390, together with eight credit points from 300 level SOC units.

Majors and coherent studies

The following programs satisfy the requirements for this degree, and are currently offered by this Division.

Area of Study	Coherent Studies	Code
Sociology	Sociology	SOC01
	Sociology of Media	SOC03

Honours program

Students with a strong undergraduate record are encouraged to do honours in sociology. In the Department of Sociology we offer an honours fourth-year program year in both the BA and the BSocSc. The honours program gives the student the opportunity to develop their skills and knowledge of the discipline at a deeper level in both sociological theory and research. At the centre of the honours year is an individually supervised piece of independent research, which provides students with the opportunity to develop skills in research, theorising, argument

and writing. An honours degree is usually highly regarded by employers, and opens up possible careers in social research and the opportunity for higher study.

Students wishing to qualify for entry to the honours year should have an overall 'B' or 'Credit' grade average. Those wishing to enter honours in sociology should have completed a coherent program of study in sociology.

The honours program consists of two seminar units and the supervised preparation of a 14,000-word research thesis. The two seminar units are: Theoretical Foundations of Sociology and Research Design.

Joint honours programs in sociology and another discipline can also be undertaken if an appropriate undergraduate preparation in both disciplines has been completed.

Students who are interested should consult the convener of this program (Dr Eduardo de la Fuente, tel: (02) 9850 9940) in the year before they intend to do the sociology honours program.

Entry requirements

Any student entering the BA program is qualified to undertake studies in sociology. Mature age students and special entry students are always welcome and usually do well (for further information contact the Student Centre, Macquarie University, on (02) 9850 7314). Note that some units are offered in the evening to meet the needs of part-time students. Applicants with a first degree in another social science area who want to take up sociology may undertake selected units as non-award students (see Non-Award Study) or, alternatively, may enter the policy and social research degrees.

Bachelor of Creative Arts

See Bachelor of Creative Arts under the Division of Society, Culture, Media and Philosophy in this section of the Handbook.

Bachelor of Social Science

See Bachelor of Social Science under the Division of Society, Culture, Media and Philosophy in this section of the Handbook.

Programs and Units

Approved programs of undergraduate study (majors and coherent studies) are listed in the section of this Handbook entitled Schedule of Undergraduate Programs. The units of undergraduate study are listed in the Schedule of Undergraduate Units, and brief descriptions are given in the section entitled Descriptions of Undergraduate Units.

Department of Sociology enquiries

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INSTITUTE FOR WOMEN'S STUDIES

The Institute for Women's Studies coordinates an interdisciplinary teaching and research program at Macquarie University. It is hosted by the Department of Sociology in the Division of Society, Culture, Media and Philosophy.

As a discipline, Women's Studies investigates what it means to be a woman or a man in society and culture. Our units look closely at the impact of gender, sex and sexuality on our lives in a variety of arenas: at home, at work, on the streets, in the classroom. Who are we? Why are we the ways we are? What directions is society taking and how can it be transformed? Women's studies and gender studies offer new approaches to untangling these questions. We bring together units in Anthropology, English, Critical and Cultural Studies, History, Law, Media and Communications, Human Geography, Philosophy, Sociology and many others. We also offer units focused solely on Women's Studies and Gender.

Like other knowledge programs within the generic Bachelor of Arts or Bachelor of Social Science degrees Women's Studies is not designed to offer vocational training as such. What it does foster is the development of critical thinking, and writing and communication skills, all of which are generic skills keenly sought by today's employers. In addition, it offers expertise on a specific range of questions to do with gender which concern many fields of employment including education; health and welfare; political or public policy making; media writing and advertising; management of private and public enterprises (sexual harassment and equal opportunity policy, issues of power, personnel management and office culture), and more.

Interdisciplinary studies

Women's Studies and Gender and Sexuality are major areas of interdisciplinary study at Macquarie University and can be part of several degrees: BA, BSocSc, BCA, BA(Hons), BSocSc(Hons). It is possible to take a unit or two for general interest. Work in another field (like media, modern history, sociology, human geography, or law) can be combined with some of our units specifically chosen to dovetail with and complement it. It is, of course, possible to specialise in Women's Studies or Gender and Sexuality as part of a coherent program of study.

Distance Education Program

All core Women's Studies units are offered externally as well as internally: WST110X2, WST210X1 and WST310X1.

Bachelor of Arts

This general degree provides maximum flexibility of course choice in the humanities and social sciences. See Bachelor of Arts under the Division of Society, Culture, Media and Philosophy in this Part of the Handbook.

Majors and coherent studies

The following programs satisfy the requirements for the above degree, and are currently offered by this Department.

Area of Study	Coherent Studies	Code
Women's Studies	Women's Studies	WST01
	Gender and Sexuality	WST02

Bachelor of Social Science

This degree is specifically tailored to the social sciences. Women's Studies units at 200 and 300 level are offered as part of this degree. See Bachelor of Social Science under the Division of Society, Culture, Media and Philosophy in this Part of the Handbook. WST210 and WST310 are offered in the "Social Theory" Unit Group.

Majors and coherent studies

The following program satisfies the requirements for the above degree, and are currently offered by this Department.

Area of Study	Coherent Studies	Code
Women's Studies	Women's Studies	WST03

Honours program

The Honours year can be undertaken solely in Women's Studies or in conjunction with honours in another discipline. This requires careful coordination between the disciplines concerned, and each prospective honours student is asked to consult with the Director of the Institute for Women's Studies to tailor a program according to the disciplinary interests of the student and the requirements of honours in other disciplines.

Students qualify for entry to the honours year on the basis of their overall grade point average and their GPA in 300 level units (see Bachelor Degree Rules). Those wishing to enter honours work in Women's Studies should have completed a program of study in Women's Studies and/or Gender Studies, at an overall GPA of 2.5 with a GPA of 3.0 in 300 level units. Normally this would include some of the coherent combination units listed above, as well as WST core units.

The honours year generally combines 3 seminar units with the writing of a short thesis, the length of which varies depending on the extent of the student's commitment to honours work in other disciplines (it is usually 12,000-15,000 words). Whatever the topic your thesis addresses, you must discuss your intentions with the Honours Convener (Judy Lattas in 2005), and submit a short proposal.

Graduate Diploma in Women's Studies and Graduate Diploma in Gender Studies

Graduate diplomas are offered for graduates who wish to train in another discipline. They consist wholly of undergraduate units in a particular discipline.

To qualify for the Graduate Diploma in Women's Studies a candidate must obtain an aggregate of at least 23 cred-

it points, including at least 11 credit points in units with the code WST and 12 credit points at 300 level or above, including such units as have been prescribed by the Academic Senate on the recommendation of the designated Dean of Division.

To qualify for the Graduate Diploma in Gender Studies a candidate must obtain an aggregate of at least 23 credit points, including at least 11 credit points in units with the code WST and 12 credit points at 300 level or above, including such units as have been prescribed by the Academic Senate on the recommendation of the designated Dean of Division.

Academic advice

Students interested in completing coherent studies in Women's Studies or Gender and Sexuality should be aware that there are core units to complete as well as five unit groups to consult in planning your degree. These are Women's Studies; Gender, Culture and Media Studies; Gender & Sexuality; Gender Studies; and Women and History.

For more detailed information on the coherencies, unit groups, Honours candidature or the Graduate Diplomas see an academic advisor from the Institute for Women's Studies or from SCMP generally. A staff member will be available for consultation during the enrolment period.

Institute for Women's Studies enquiries

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WARAWARA—DEPARTMENT OF INDIGENOUS STUDIES

Indigenous studies at Macquarie is an interdisciplinary program of units that focuses upon the idea of "indigenous", both at the national and international levels. Students who wish to specialise in indigenous studies within the Bachelor of Arts (BA) or the Bachelor of Social Science (BSocSc), or include indigenous studies units as a minor part of their degree program, should refer to the Interdisciplinary Studies section.

Interdisciplinary studies

Indigenous studies is an interdisciplinary program of units whose primary focus is indigenous Australia. Warawara — Department of Indigenous Studies offers about half of the core Indigenous Studies units: ABST100 Introduction to Australian Indigenous Studies; ABST200 Issues in Australian Indigenous Studies; ABST210 Aboriginal Prehistory; ABST300 Pathways for Indigenous Studies and ABST310 Indigenous Film: the word through the eyes of 'Others' other Indigenous Studies units are taught by staff in various Departments: Anthropology, Biology, Critical and Cultural Studies,

Education, Human Geography, History, Law, Politics and Sociology.

Students interested in Australian Indigenous Studies should include within their program the core units offered by the Department (ABST100, ABST200, ABST210, ABST300 and ABST310). If they wish to specialise in the field, they should also include within their program additional Indigenous Studies units at 200 level and 300 level (see Coherent Study in Indigenous Studies, below). It is also possible for students to specialise in Indigenous Studies as well in their primary discipline (e.g. human geography, history, etc.). Students who do not intend to specialise in the area may wish to include Indigenous Studies as a minor part of their academic program.

Coherent Studies in Indigenous Studies

Coherent studies ABR01 and ABR05 are approved for the Bachelor of Arts. Coherent studies ABR02, ABR03 and ABR04 are approved for the Bachelor of Social Science.

It is important to check the Schedule of Undergraduate Units to determine the availability and prerequisites for these units. For advice on developing a coherent course of study, contact the Department of Indigenous Studies, tel: (02) 9850 6751.

Coherent Study in Two Study Areas

The following patterns suggest sequences of units in Australian Indigenous Studies that would be useful for students pursuing a coherent study in Australian Indigenous Studies alongside their primary discipline.

Combination with Anthropology or Sociology

100 level

ABST100; ANTH150; ANTH106; SOC175; SOC180

200 level

ABST200; ABST220; ABST210; HIST216

300 level

ABST300; ABST310; ABST320; ANTH384; SOC390 plus one of the following

BIOL350; BIOL351; EDUC358; GEOS310; HIST316; LAW418

Combination with History

100 level

ABST100; HIST109

200 level

ABST200; ABST210; ABST220; HIST216; HIST245

300 level

HIST316; POL340

plus two of the following:

ABST300; ABST310; ABST320; ANTH384; BIOL350; BIOL351; EDUC358; GEOS310; LAW418

Combination with Politics**100 level**

ABST100; POL165

200 level

ABST200; ABST210; HIST216

300 level

HIST316; POL340

plus two of the following:

ABST300; ABST310; ABST320; ANTH384; BIOL350; BIOL351; EDUC358; GEOS310; LAW418

Combination with Biology/Environmental Studies**100 level**

ABST100; BIOL114

200 level

ABST200; ABST220; BIOL227; HIST216

300 level

BIOL350; BIOL351; GEOS310

plus two of the following:

ABST300; ABST310; ABST320; ANTH384; EDUC358; HIST216; HIST316; LAW418

Students who wish to place a greater emphasis upon Australian Indigenous Studies in their program without necessarily taking coherent study can do so by selecting from the units listed below:

- Units with a primary focus upon Indigenous Australia:
ABST100; ABST200; ABST210; ABST220; ABST300; ABST310; ABST320; ANTH384; BIOL350; BIOL351; EDUC358; GEOS310; HIST216; HIST316; LAW418
- Units without a primary focus upon Indigenous Australia but with material relevant to an Australian Indigenous Studies program:
ANTH150; ANTH365; AUST200; CUL201; CUL301; ENGL361; GEOS328; HIST340; LAW412; POL340; SOC175; SOC180; SOC390

Degrees Offered

Bachelor of Arts

Bachelor of Social Science

BSc with BA. Full details are available under the entry for the Division of Environmental and Life Sciences in this Part of the Handbook.)

Majors and coherent studies

The following programs satisfy the requirements for this degree, and are currently offered by this Department.

Area of Study	Coherent Studies	Code
Indigenous Studies	Indigenous Studies	ABR01
	Indigenous Studies	ABR02
	Indigenous Studies & Anthropology/Sociology	ABR03
	Indigenous Studies & History/Politics	ABR04
	Indigenous Studies	ABR05

The Department of Indigenous Studies, which coordinates the interdisciplinary program, offers the following core indigenous studies units:

ABST100; ABST200; ABST210; ABST220; ABST300; ABST310; ABST320

Entry requirements

Candidates who wish to take 200-level units, but who have not satisfied the appropriate prerequisites may be considered for admission provided that they have gained at least 18 credit points towards their degree.

Academic advice

Students intending to major in Indigenous Studies are advised to consult with staff members concerning their programs of study. A staff member will be available for consultation during the enrolment period.

Honours program

To be eligible for entry into the honours program, students must have satisfactory completion of 18 credit points at 300 level in the interdisciplinary coherency in Indigenous Studies (see Interdisciplinary Studies for details); or an equivalent program acceptable to the Indigenous Studies honours committee; and a GPA of at least 3.0 in Indigenous Studies units and a GPA of at least 2.5 overall.

Students requiring advice on the planning of a coherent Indigenous Studies program or who need general advice should contact Ms Jennifer Newman on (02) 9850 8631.

Warwara also coordinates a number of programs specifically for Indigenous Australian students: Advanced Diploma/Diploma in Community Management and the Bachelor of Teaching (Early Childhood Education). For more information contact Warawara on (02) 9850 8036.

Programs and Units

Approved programs of undergraduate study (majors and coherent studies) are listed in the section of this Handbook entitled “Schedule of Undergraduate Programs”. The units of undergraduate study are listed in the “Schedule of Undergraduate Units”, and brief descriptions are given in the section entitled “Descriptions of Undergraduate Units”.

Department of Indigenous Studies enquiries

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Macquarie Christian Studies Institute

Macquarie Christian Studies Institute (MCSI) is a Christian learning community informed by the evangelical tradition, located on the Macquarie University campus. It shares the aims of the University to contribute constructively to the investigation, communication and extension of knowledge, with a particular goal of thoughtfully exploring the relationship between faith and understanding. As well as offering academic units of study in a wide range of Macquarie University degree programs, MCSI is actively engaged in conducting research, professional development activities, continuing education and consultation in the wider community.

MCSI seeks to bring faith to life: to relate Christian faith perspectives to contemporary society and the wider everyday world — in particular, the world of work, the professions, contemporary culture, and everyday life. MCSI seeks to highlight the ways in which spiritual and ethical questions are fundamental to people's personal, social, cultural, and professional worlds, and to explore the rich resources found within the Christian tradition for addressing these questions.

Through a strategic alliance with Macquarie University, MCSI units are available to students who wish to incorporate Christian Studies units for credit into their degrees. MCSI values academic freedom, and is committed to an on-going dialogue with standpoints other than its own. Entry to MCSI units is open to students who do not have a personal commitment to Christian faith perspectives.

MCSI has a team of highly qualified lecturers who are committed to the practical application of faith to everyday life. MCSI places a high value on the quality of relationships within the learning community, and provides mentors who can help students develop in their personal understanding and in their sense of calling and commitment to their future vocation.

Macquarie Christian Studies Institute Ltd is a privately funded, non-profit public company.

MCSI Units

1. Macquarie University recognises and accepts MCSI units for inclusion in Macquarie University awards. MCSI provides students with transcripts showing grades using MU's grading system (HD, D, Cr, P, PC, F). However, the MU transcript shows these grades as Satisfactory or Fail.

2. As a private provider, MCSI charges tuition fees for its units. Students do not incur a HECS debt for that unit. A Commonwealth government loan may be available for payment of MCSI fees.
3. International students at Macquarie University who enrol in MCSI units pay their normal international fees to the University. No further tuition fees are payable to MCSI.
4. No more than six MCSI credit points at 300 level and above may be included in a MU degree program. Prerequisites generally only apply to MCSI units at 300 level and above.
5. MCSI teaching formats include 13-week semester classes, short-term intensives, or a series of weekend immersions.
6. Students not seeking degree program credit may audit MCSI units at a reduced cost.
7. Students from other universities may enrol in MCSI units and apply to credit the units into their degree program under cross-crediting provisions.

Unit Descriptions

A list of units offered by MCSI, and descriptions of those units, are in Part Three of the Handbook under Descriptions of Undergraduate Units. See also MCSI's website at www.mcsi.edu.au

Bachelor of Christian Studies and MCSI Certificates

Students who take several MCSI units may wish to extend their Christian Studies to complete a Bachelor of Christian Studies or an MCSI Certificate. The Bachelor of Christian Studies is approved by the Australian College of Theology. Students who complete four units of study with MCSI are eligible for an MCSI Certificate. This is not an accredited award, since students receive the credit for their studies into their actual degree programs. It is a statement of attainment that students have undertaken an integrated program of Christian Studies as part of their university degree.

For students studying Teacher Education, MCSI offers a Certificate in Christian Education. Students must complete five MCSI units, including two units that offer Christian perspectives on education and schooling and Mentored In-School Experience (a one-year program of observations and activities in a Christian School setting). This is not an accredited award. It is a statement of attainment that, as part of their university degree, students have completed a program that integrates Christian perspectives on education and schooling with other Christian Studies.

For further information on all MCSI programs and units contact MCSI directly. The MCSI office is located on Level 0, Student Union (SAM) Building (downstairs from the Co-Op Bookshop, and directly opposite the National Australia Bank).

Macquarie Christian Studies Institute enquiries

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